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J. W. Marshall and Mrs. Wimmer Testing Gold in Boiling Soap.

California Gold Book

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ITS DISCOVERY AND DISCOVERERS

AND

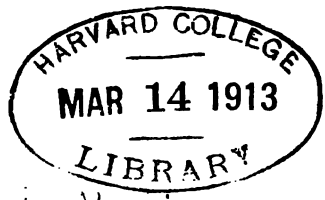
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BY

W. W. ALLEN AND R. B. AVERY

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1893

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To the Marvelous Progress of California and the Brave and Industrious Citizens whose handiwork is shown therein, is the California Gold Book Reverentially Dedicated by

The Authors.

INTRODUCTORY.

THE CALIFORNIA GOLD BOOK claims the attention of the public for several reasons peculiarly its own. Up to date there has been no authoritative history of the discovery of gold in California, nor of those directly identified with that important event. Even in California different dates are given as the day when the first gold was picked up by James W. Marshall. Several years ago the first lump of gold picked up by a white person in California, and to which all the succeeding excitement and wonderful results must be credited, came into the possession of W. W. Allen, one of the authors of the California Gold Book. He spent time and money in proving the genuineness of the historical nugget, and the exact date upon which it was discovered. It had never been out of the possession of Mrs. Elizabeth Jane Wimmer since it was given her a few days after its discovery by Marshall and tested by her. She and her husband made oath to its genuineness, and they were honest and reputable persons. It was twice shown to James W. Marshall by Mr. Allen, who indorsed its identity, the date of its discovery, and the other facts in regard to it detailed in this history. There were several other persons, now prominent business men of San Francisco, who had been shown the nugget when visiting Mrs. Wimmer and her husband at their home at Coloma, soon after the discovery was made, and while a wonderful interest attached to the "first find." Its peculiarities are indellibly impressed upon their minds. The identity of the famous lump of gold is therefore easily established without the aid of the following depositions:

STATE OF CALIFORNIA, COUNTY OF SAN DIEGO:

Elizabeth Jane Wimmer, being duly sworn, deposes and says: I am the wife of Peter L. Wimmer. My husband and I went to Coloma, on the American river, California, in the year 1847. James W. Marshall lived with us. We went there to build a saw-mill for Gen. John A. Sutter.

In January, 1848, Messrs. Wimmer and Marshall picked up a nugget of metal and Mr. Wimmer sent it to the house to me by our son, and I boiled it in a kettle of soap all day to test it and see if it was gold. It proved to be a nugget of gold.

From that mining began. The nugget of gold now in the possession of W. W. Allen, of San Francisco, is the identical nugget thus tested by me in January, 1848, and I have preserved it ever since.

ELIZABETH JANE WIMMER.

Subscribed and sworn to before me this 23d day of March, 1885.

J. M. DODGE,
SEAL CLERK OF THE SUPERIOR COURT, SAN DIEGO, CAL.
By A. J. BEARD,
DEPUTY CLERK.

STATE OF CALIFORNIA, SAN DIEGO COUNTY:

Peter L. Wimmer, being duly sworn, on oath says: That he is the husband of Elizabeth Jane Wimmer; that they were employed in the year 1847 by James W. Marshall and General Sutter to work at building a saw-mill at Coloma, on the American river, in the State of California; that they, in company with James W. Marshall, discovered the gold afterwards mined out at that place as follows, to-wit: Marshall and Wimmer were together and picked up the first nugget. Wimmer sent it to the house by his little boy with instructions to Mrs. Wimmer to test it, and she boiled it in a kettle of soap and tested it. Marshall afterward took it to Fort Sutter and had it tested with acids, and it proved to be gold. That the nugget now in the possession of W. W. Allen is the identical nugget thus discovered and tested by us, and has been preserved by Mrs. E. J. Wimmer as a relic of the great discovery, and is still her property.

PETER L. WIMMER.

Subscribed and sworn to, before me, this 18th day of April, 1885.

A. J. BEARD.
Justice of the Peace of said county and State."

The California Gold Book asserts that January 19, 1848, was the date upon which the great discovery of gold

in California was made, because: First, for the reason that that was the date given by Peter L. and Elizabeth Jane Wimmer; and was the only date mentioned by James W. Marshall in the conversations W. W. Allen had with him in regard to this matter. If more testimony is needed it is supplied by the following autograph card which Marshall distributed among his friends and the curious:



OLD SUTTER MILL.

AUTOGRAPH OF

Jas. W. Marshall

THE DISCOVERER OF GOLD IN CALIFORNIA

January 19th, 184[illegible]

The date upon which any past event occurred is not more clearly and reliably fixed.

The sketches of James W. Marshall, Peter L. and Elizabeth Jane Wimmer, are largely autobiographies, being compiled from statements made by these persons, and written down at the time, and the correctness of which, so far as the Wimmers are concerned, was verified by frequent repetitions. They deserve to be received as the biographies of honest and earnest pioneers.

California contains more than one hundred and one million acres of land. Of this more than half is still owned by the United States. The greater part of that is hilly and much mountainous, but very much is adapted to the production of the finest qualities of fruits, grapes and nuts. Hence the pen photographs of all the counties in the State, which will be found essentially correct, and which will give homeseekers a fair estimate of every part of California. The assertion is made, with anxiety to be absolutely correct, that "no mistake can be made whatever part of California is selected for a home." The "citrus belt" used to be

located exclusively in southern California. Practical experiment has proved that it extends to the "snow line," on the mountains, and that many kinds of fruits do best where snow is not unknown.

The mountains are yet rich in opportunities for the searcher after precious metals. Many promising fields are still unexplored. Silver mines are not deemed the most desirable property at this time, though more or less gold is generally found in combination with silver. When American law makers determine that the producer shall be given the same influence in fixing the value of the product of his courage and industry as the foreign broker; when the same rule is applied which took gold out of the list of speculative commodities, then will silver mining be again profitable, and coast prosperity will be unobstructed by the behests of foreign stock dealers. Resumption of specie payments was as easily accomplished in this country as was ever any human act when the Government decided that every public obligation could be satisfied with any description of national money. Silver will be ennobled, and its value fixed in this country—which is as far as an American statesman need look—whenever the Government acts for the best interests of its own people without consulting the wishes of foreign purchasers of bullion.

The authors of the California Gold Book believe the railroad as much of an educator as the public school, and as great a civilizer as any other instrumentality in use among men. It has given railroad enterprises only their appropriate prominence and only their proper credit. Less could not have been done and a claim upon the respect of its readers retained. The evidence is in its pages, emphasized by the wonderful growth which has followed the introduction of railroad facilities in sections possessing no greater natural advantages than others that have retrograded because lacking this convenience. The railroad will remain man's chief helper until some speedier means of transit and intercommunication has been discovered.

It was the original intention of the authors of the California Gold Book to more extensively illustrate it. For this purpose a large number of photographs were obtained from the wonderful collection of coast scenes held by

Tabor, of San Francisco. Only a few of these could be used, but for them we give proper credit here.

California is first in climatic and health and comfort giving advantages; third in wealth; fourth as an importer of merchandise, and fifth in exportations. This among States that were aged before the first American settlement had been established within her bounds. She was given number "31" in the roll of States only forty-two years ago. Situated beyond the mountains, and outside of lines of travel, she has overtaken and passed all but five of her prosperous sisters in every line distinguishing advancement, and in ten years more will be at the head of the class in everything but population and importations, and she will retain the place to which God has assigned her as the one State to which all eyes are turned in admiration and wonder.

THE AUTHORS.

CALIFORNIA GOLD BOOK.

CHAPTER I.

REVOLUTIONARY ORIGIN OF A PIONEER.

The Wimmers were originally a noted family in the north of Ireland, and so close to the Scotch border that they may well be termed "Scotch-Irish." From various causes large numbers of the brave and independent natives of that section were among the earliest emigrants to the New World. From the beginning of the eighteenth century until the Declaration of Independence the departures from Irish ports of natives of the north of Ireland and Scotland frequently reached the enormous number of more than ten thousand in a month. Comparatively, this was a larger number than now disembark at American ports from all the rest of the habitable globe. No wonder that the British authorities viewed with alarm the disappearance of such vast numbers of the men from among whom she had been in the habit of recruiting her armies. No wonder that every argument was used to stay the steady and increasing departure of emigrants. But the sturdy natives continued to land on these shores, and spread out to every part of the unexplored country. The careful and conscientious student will readily perceive the vital influence which these brave and independent pioneers have exercised upon the destinies of this country at every stage of its history. It might almost

be said that they and their descendants made its glory and greatness; for, from the beginning until now, men of Scotch-Irish blood have been foremost leaders in every creditable achievement.

It is now several years since Horace Greeley advised the young man to "go west." Ages before that the Creator had implanted in the hearts of the best and bravest of the human race a disposition to "move on" and "spy out the land"—to carry civilization and Christianity to the uttermost parts of the earth. It was this God-inspired disposition which compelled Columbus to turn the prow of his small vessel toward the center of an unknown and illimitable sea, in the hope that he might find races of men to civilize, or new worlds to explore. It is this God-implanted craving for adventure and danger which has subdued the vast wilderness in America with startling celerity, and created churches and school-houses on almost every section of land of the entire continent. It is the universal disposition to "go west" which has made this, less than four hundred years after its discovery, the wealthiest, most enlightened and most powerful nation in the world—an educating example to all peoples who are ambitious to become respected, prosperous and happy.

John Wimmer was born in Virginia about the year 1750. When war was declared against Great Britain, it took him no time to select sides. He was a born patriot, and joined the ranks of the revolutionists, as did ninety-nine per cent of those of Scotch-Irish parentage. John Wimmer possessed a fine constitution, great courage, an unassuming disposition, splendid intellectual qualities and coolness and self-possession which never deserted him under the most dangerous

and trying circumstances. These characteristics rendered him invaluable as a scout and Indian fighter, and his services were in constant demand until victory was achieved by the patriot army.

Some years after the close of the revolutionary war, John Wimmer removed to Ohio, finally settling at Cincinnati. Previous to this Marietta, on the Ohio river, had become an important trading post, having been settled by a colony from New England. The country away from the river was still subject to incursions from roving bands of depredating Indians. The experience obtained during the war of independence stood Wimmer in good stead during these times. One incident is related which shows the coolness and rare resources possessed by this man. Returning from the trading post in 1808 Wimmer was captured by a band of marauding Indians, and hurried off to their temporary camp on the Ohio river, where he was kept an unwilling prisoner. He at once commenced to gain the confidence of the chief and his tribe by meeting them with smiles, and engaging cheerfully in any amusement or duty in which others were employed. His course seemed to impress the leading men with a sense of his great superiority, and they began to look upon his skill with arms, and his apparent contentment and undeviating good humor, as connecting him in some degree with the Great Spirit. The culmination came soon. One day, when sitting in front of the wigwam of the chief, a large bald eagle made its appearance over the camp, circled about for awhile, and then sailed away. Next day, about the same hour, the huge bird again appeared, and commenced circling above the heads of the watching Indians. Wimmer knew

that it had espied something of which it intended to make a meal, and that it would return again and again, until it succeeded in making the intended capture or was wounded and driven away. Providence had supplied him with the opportunity for which he had been praying. Wimmer arose, and with upturned eyes, and finger pointing to the circling eagle, in his usual calm, firm and impressive tones, thus addressed the awed Indians:

"Does the mighty Chief and his proud braves see the Messenger from the Great Spirit? Should he come again it would be to guide an enemy, and the Chief and all his braves would be destroyed. But the Great Spirit has provided you with a guardian. When I was brought here I realized that it was for your salvation. You have been uniformly kind to me, and I declare that that treacherous bird shall never pilot an enemy to this camp. The great Spirit has given me power to divine his intentions, and he has also given me power to prevent his executing them. The Great Chief and his valiant braves, who have treated me so like a brother, shall have as a memento of that kindness, and as evidence that their conduct has saved them, the head of that cruel bird who would compass their destruction."

The Indians were silent with superstitious fear. Wimmer seized his rifle, and with nerves of iron and unerring aim, fired at the slowly circling eagle. At the crack of the rifle, the huge bird began to whirl over and over in its rapid descent to the earth, and in a few moments fell lifeless almost at the feet of Wimmer. The first effect was a glow of relief on the scared faces of the superstitious braves, to be instantly

followed by a frenzy of excitement as they realized that the messenger of the waiting enemy was forever powerless for evil. So great was the effect upon the Indians, that John Wimmer was loaded with presents, and escorted in safety and honor to the post at Marietta. He never lost his influence with this powerful tribe, and was the successful arbitrator in all disputes arising between the Indians and settlers as long as he remained on the Ohio river.

When this country became engaged in war with England in 1812, John Wimmer again enlisted and served until the troops were disbanded at its close. His services were specially valuable in repelling the merciless hordes on the frontiers of Ohio and Indiana. Incursions by these savage allies of Christian England were very frequent, and the destruction they wrought terrible, until after the defeat of Tecumseh at Tippecanoe by General Harrison in 1813.

In 1824 John Wimmer removed to Henry county, Indiana, where the last years of his life were spent among neighbors who loved and respected him for the nobleness of his character, and honored him for the service he had rendered his country.

CHAPTER II.

A NATURAL ADVENTURER.

Peter L. Wimmer was born in Cincinnati, Ohio, on the 5th day of April, 1810, eight years after that State had been added to the sisterhood, and when Cincinnati was comparatively a village outpost. He remained there until 1824, when his father removed to Henry

county, Indiana, less than eight years after that State had been admitted into the Union. Peter L. Wimmer was not distinguished as a boy for love of books. He inherited the calm, self-possessed disposition of his father, and was an enthusiastic lover of nature. He never was excitable, and always hopeful of the future. The limited population, outside the village boundaries, made all the country appear like a wilderness, and young Wimmer would have played "truant" if there had been schools for him to attend, and would have spent most of his days on the banks of the musical brooks, dreaming of whence their sparkling waters came and whither they were tending; or in the dense forest, studying woodcraft, and watching the gambols of the squirrels, or listening to the songs of birds. It was thus that most of his days were spent, after attending to such duties about the cabin as were required of him. He was small of stature, but possessed of great strength for one of his weight, and always enjoyed perfect health. Under such management his mind matured faster than his body and the experience was fitting him for the future which destiny had prepared for him. When he was fourteen years old life in Cincinnati seemed too confined for his father, who was an involuntary pioneer, and it is not surprising that young Wimmer heartily seconded the proposition to invade the wilderness. Then the move was made to Indiana. More room was promised them. For four years the family remained united, respected and especially happy and prosperous. Among their neighbors was the family of Capt. George W. Harlan, who was among the very first to cross the plains in 1846. The families were very intimate, and doubtless mainly

because Capt. Harlan had a daughter Polly who was more beautiful in the eyes of Peter Wimmer than anything else which had come from the hand of the Creator. He was not slow in making Miss Polly understand the condition of his heart, and was made happy by learning that the feeling was heartily reciprocated. As his life was without reproach and his disposition most kind and affectionate, the betrothal received the sanction of both families, and in the fall of 1828 Peter L. Wimmer and Polly Harlan were married, receiving the congratulations of every acquaintance in Henry county.

Now, at this time, Peter L. Wimmer had just passed his eighteenth year. He was the head of a family, however, and considered it his duty to hew out his own destiny. To that end he immediately emigrated to Michigan, still a territory, and then more unsettled than either Indiana or Ohio. He retained his residence in Michigan less than three years, when he removed to Illinois and settled on the Illinois river, near where the Kankakee empties into it. The "Prairie State" was then almost a boundless, uninhabited plain. A fringe of timber bordered all the water courses, and nearly the entire balance of the State was treeless. A few adventurous families from Virginia and Kentucky had even then settled along the water courses of the lower half of the State, but the prairie solitudes were broken only by the whirr of the wings of the startled quail or prairie chicken, or the howl of the wolf. Black hawk and his fierce and merciless braves still claimed the prairie country for a hunting ground, and the shelter of the beautiful groves as their own rightful camping place. They were frequently out on the war path, their hands

red with the blood of their victims, and their horse trappings decorated with the scalps of murdered settlers. These were not all mere rumors. Too well the pioneer knew that the tales were based upon terrible blood-curdling tragedies, and that the horrid fate was one which might confront him and his loved ones. Scarcely a day went by that some passer did not tell of emigrant trains attacked with a loss of one or more of their members. These tales of cruel massacres could not fail to terrify every settler on the frontier, but they seemed to discompose Peter L. Wimmer less than any of his neighbors. All day long he would perform labor in his fields as faithfully and unconcerned as though he were surrounded by all the protecting influences of the highest civilization. He had sought the frontier advisedly, and knowing thoroughly every form of danger that would threaten his peace. He was determined not to lay aside his duty whatever might betide. His evenings were spent in his little cabin with wife and children. He possessed a fine voice and a splendid ear for music. With a retentive memory, his repertoire of domestic songs and pleasing tunes was unusually extensive. Till bed-time he could make the home circle as happy and contented as though there were not a barbarous Indian anywhere between the distant seas. So the evenings were rendered ten-fold dearer by the cheerful notes of Peter, as he sung hymns and love ditties to Polly and the children, and it mattered not how often they may have heard them, they were always as heartily applauded as if they were brand new.

Thus lived Peter and Polly Wimmer from 1831 to 1836. The latch-string of their cabin door was always

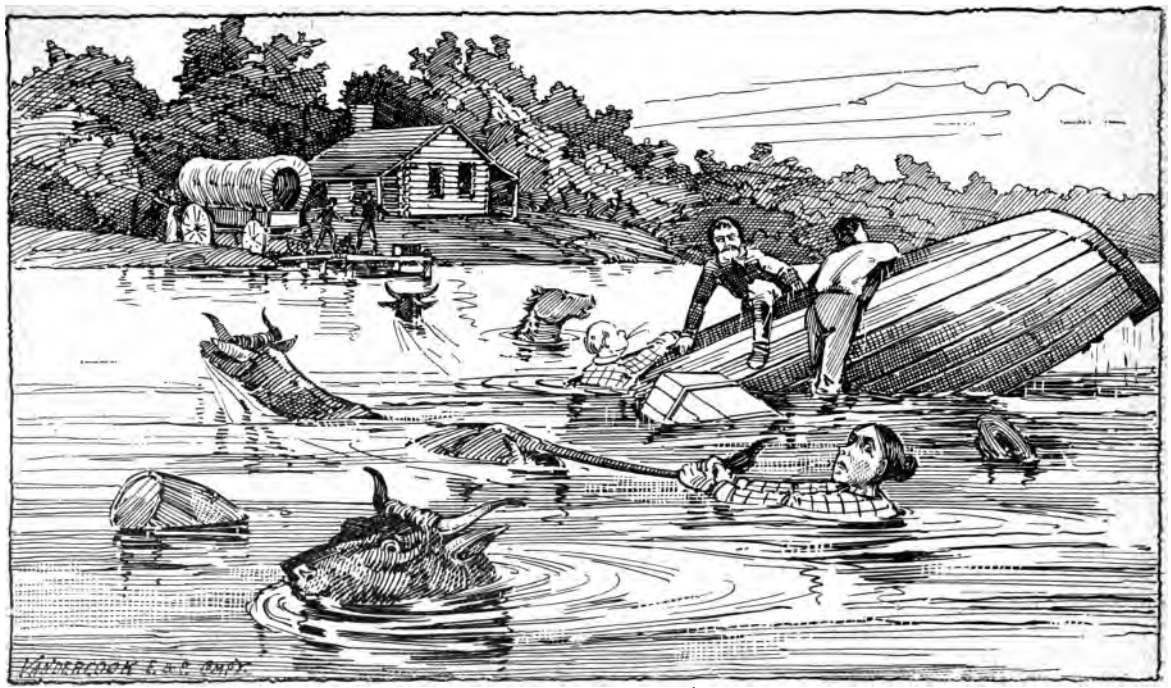
in easy reach of the weary wayfarer and a warm welcome was given to the traveler, no matter whence he came. The sterling characteristics of Wimmer fitted him for leader, and to that place he was pushed by the unanimous voice of every one engaged with him in any enterprise, whether of danger or for the amusement and improvement of his fellow pioneers. The home on the Illinois river had prospered, and a considerable community had settled in the vicinity of the Wimmer homestead. They were courageous, as successful pioneers must of necessity be. All were hopeful, and the realities in regard to that now populous section have not much surpassed the prophecies of every one of the early settlers. They knew that progress was inevitable, and that eventually the prairies must become as thickly populated as any State in the East, or any place in the old world. Still the coming of increasing numbers of home hunters was the signal for most of the first settlers to "move on," and they struck out for a section containing more room. They were not as greedy for riches as for adventure, and followed on toward the setting sun. It is doubtful whether any of the early settlers dreamed of the possibilities which attended the growth of Chicago, or the great prosperity which would be achieved by those who remained in the State. Nevertheless, they did know that the lands west of them would be claimed by some one at an early date, and that it was honorable to be esteemed a hardy pioneer. So the stay in a new settlement was seldom more than a halt, and the restless and expectant fever kept their faces turned toward the west.

CHAPTER III.

A BLOODLESS VICTORY.

The equable temper, kindness of heart, upright conscientiousness, moral characteristics, great personal courage and absolute self-possession, of Peter L. Wimmer exactly fitted him for a safe and conservative leader. These qualities more than neutralized his lack of "book-learning." In fact, book-learning was at a discount on the frontiers. The languages in use were the English, pretty well dove-tailed with provincialisms, and the Indian dialect. A knowledge of these were vitally necessary, and Wimmer possessed the gift of quickly picking up an understanding of the Indian talk, as well as a very thorough knowledge of his intentions, which almost seemed to be intuitive. But throughout his entire life, the great abhorrence in which Wimmer held any degree of cruelty caused him to reach results by strategy, rather than by open warfare. Nevertheless, he was always prepared for the latter should peaceful measures fail.

In 1832 the Indians on the Kankakee river were in a very discontented state. They seemed to have forgotten the decisive defeats sustained in their battles with the forces under Gen. Harrison a few years before, and on every occasion they protested against the invasion of their prairie hunting grounds by the whites. Incursions against the settlers were frequent, and the losses of horses and cattle an every day occurrence. Sometimes an unguarded settler was killed, and his mutilated body left where it fell. These occurrences terrorized the pioneers without inclining them to re-



Overboard.

treat. They had come to stay, and felt sure they were but the advance guard of a vast population.

In the early fall of 1832, signs which were startlingly significant to Wimmer, convinced him that the savages were preparing for a general massacre of the settlers on the Illinois river. The disappearance of grazing stock was more frequent. Small bands of strange Indians were seen in the vicinity of the settlements. Canoes, with two or three red men to each, were known to pass down the Kankakee into the Illinois river. Those Indians met by white men were surly and insolent. It was learned that a camp was forming on the river bank just below the mouth of the Kankakee, and but a few miles from the Wimmer cabin. At that time the settlement contained over a dozen families, besides Peter, Polly and their four children. It was determined by the white men in council that something must be done at once, and Wimmer recommended that the Indians be met and decisively conquered before great numbers had time to assemble at what appeared to be a preconcerted rendezvous. Ten brave men announced their readiness to follow Wimmer in defense of their wives and little ones. It was settled that all the women and children should be left at Wimmer's cabin, and the men, properly armed, should descend the river in large canoes, and capture the camp of the Indians during the night. This plan was carried into effect Each of the eleven men was armed with a reliable gun. and knife, with the effective use of which every one was familiar, and three or four of the party were also provided with the old-time cavalry or horse pistol.

It was a clear night in September, 1832, when Wimmer and his small command got ready for their cam-

paign against merciless savages. Their boats were prepared, and all the members of the settlement were assembled to see them embark. Only those who have been through such scenes can form any idea of the fear and solicitude with which the wives gave the parting kiss to their husbands, or the earnestness of the prayers which ascended to heaven for their safe return. No one dared hope that all would come back alive and unwounded. Each wife feared that she might be doomed to widowhood. And the prayers and tears continued all that night through.

Finally the men were off. They proposed to reach the Indian camp at the hour when it was known they were in the embrace of deepest sleep—about three o'clock in the morning. As the speed of the current would take them to the point they wished to reach previous to that time, there was no need to use the paddles except to guide the course of the canoes, and the passage was as silent as the grave. Occasionally the passing canoes would be scented or espied by some deer that had come to the river to drink, and it would bound away in affright. A few times slumbering birds were scared from their perch. Besides these insignificant noises, there was nothing to disturb a stillness which could be felt by every one of the crew. All the discussion that was necessary had already taken place. Every man knew that failure meant a horrible death to the loved ones whose hope was in their strong arms and brave hearts. The vital necessity for success had braced every heart to its utmost tension.

Arrived at the mouth of the Kankakee, the canoes were silently guided to the bank. Hidden under the overhanging limbs four Indian canoes were found.

As these would not carry more than three each, the party could very correctly estimate the number of savages they would have to overcome, the squaws having gone to the rendezvous by land. There could not be more than twelve, and possibly only eight. The first move was to cut loose the canoes, and push them out into the current of the Illinois river, then to secure their own canoes so that they could be used for crossing the river should retreat become necessary. Now for the attack. As soon as the top of the bank was reached, the silent party discovered the smoldering embers of the Indian camp-fire not more than a hundred yards away. The braves had selected a slight depression or little cove, for their camping place. Posting his men where they would command the camp, Wimmer went forward to reconnoiter. This was a most perilous duty, because it was scarcely possible that the invariable guard would not be found awake and alert. Crawling forward as noiselessly as any snake or savage, he soon discovered that eight soundly sleeping Indians, painted as if for war, laid alongside of the camp-fire, and the guard had succumbed to the somnolent influences of the silent night, and unsuspicious of danger, was sleeping as soundly as any of those he was trusted to protect. It took Wimmer but a few moments to collect all the arms the braves had placed within easy reach when they lay down to rest. Loaded with these he crawled back to his anxious comrades, and advised them of the number and condition of those they had to contend with. The arms he had brought were safely hidden away, and then all returned to the camp-fire, where a struggle was anticipated which was not without great danger, even though the stalwart braves were disarmed.

But, in the meantime, the active mind of Wimmer had conceived a plan for terrorizing the braves which is without parallel in all history. He directed his men to crawl to positions where they would completely surround the sleeping braves; to have their weapons in readiness, but not to fire on an Indian until he gave the command. Then he crept to the position he desired, and laying his gun on his lap, in a steady voice, commenced singing:

"Heaven's delight is human kindness
To the traveler on his weary way," etc.

The first notes aroused the savages as completely as would the firing of a park of artillery, and every Indian grabbed for the weapon he was sure was in reach of his hand. Their consternation was beyond description at finding their weapons gone, and themselves at the mercy of an armed band of resolute men, and the ones, too, whom they had done so much to injure in the recent past. But what made their flesh creep with superstitious horror was the placid and unconcerned demeanor of Wimmer, who continued his song. The Indians stood paralyzed. When Wimmer had concluded his concert, he motioned the awed audience to be seated, and they obeyed without a dissenting gesture. Then he recounted to them the helpless condition they were in, and claimed that it was by the consent, and with the assistance of the Great Spirit. He told them of the depredations they had been committing—thefts and murders—upon a people who desired to live in peace with them, and do them good. These outrages must stop. The settlers would no longer put up with theft and murder. If the chief would now agree to return the stolen stock; to commit no more depredations, and

to assist the settlers should other roving bands threaten them with attack, then peace would then and there be agreed upon, and the arms and canoes would be returned to them, and they would be suffered to depart in peace. The squaws, encamped only a hundred yards distant, had been awakened, and commenced a horrible howling when they found their husbands prisoners in the hands of armed white men. The chief soon silenced these, and without hesitation agreed to every suggestion made by Peter. The great pipe was lighted, and after one whiff the chief passed it on to Peter, and from him it went the rounds of every one of the contracting parties. The inspiration which had come to Peter had enabled him to obtain a bloodless victory over a dangerous band of Indians, and to prove to them that he believed other Indians than dead Indians could be good Indians. After peace was ratified, the canoes, which had floated but a short distance, were brought back, and, with the arms, were returned to the Indians. The chief asked the privilege of escorting the "great singer" and his men back to the settlement, and the return soon commenced.

Wimmer and the chief were seated in one of the Indian canoes, and took the advance. All the others followed. All night long the anxious watchers at the settlement had kept up their supplications, making frequent trips to the bank of the river, and peering away into the darkness in the direction their protectors had gone. At daylight all assembled on the bank and watched and waited. Sometime after sun up, Polly saw a strange canoe turn a bend in the river, and that a painted warrior occupied it with her husband. The worst was feared, and a wail went up when they felt

certain that those of their husbands not killed were returning as prisoners of the savages, who, they felt sure, would proceed to massacre them all. Peter signaled that all was well, and the reaction upon the wrought-up wives and children was almost painful. But when all had arrived at the landing, and the results of the trip were made known, the shouting and rejoicing was never surpassed by the same number in the great State of Illinois since its first settlement. And it is a fact that the people of this settlement were never more disturbed by hostile Indians. Peter and Polly remained here in peace and security, and much beloved, until 1836, when they removed to Missouri, as they had been urged to do by Captain Harlan.

CHAPTER IV.

PINING FOR THE INDIAN WAR-WHOOP.

Captain George W. Harlan, whose ancestor came to Pennsylvania with, and as a friend of Sir William Penn, commanded a company during the later years of the terrible Indian wars on the Western frontiers. He did gallant service in the army commanded by General William Henry Harrison. Indeed, his whole life had been spent in fighting Indians, until the close of active hostilities with England in 1812–13, lost him his occupation. With the conclusion of peace he settled with his family in Henry county, Indiana, and for several years his relations and friends hoped his days would be spent there. But in a few years the Indian and buffalo had departed for the wilds of the West, putting the Mississippi and Missouri rivers between

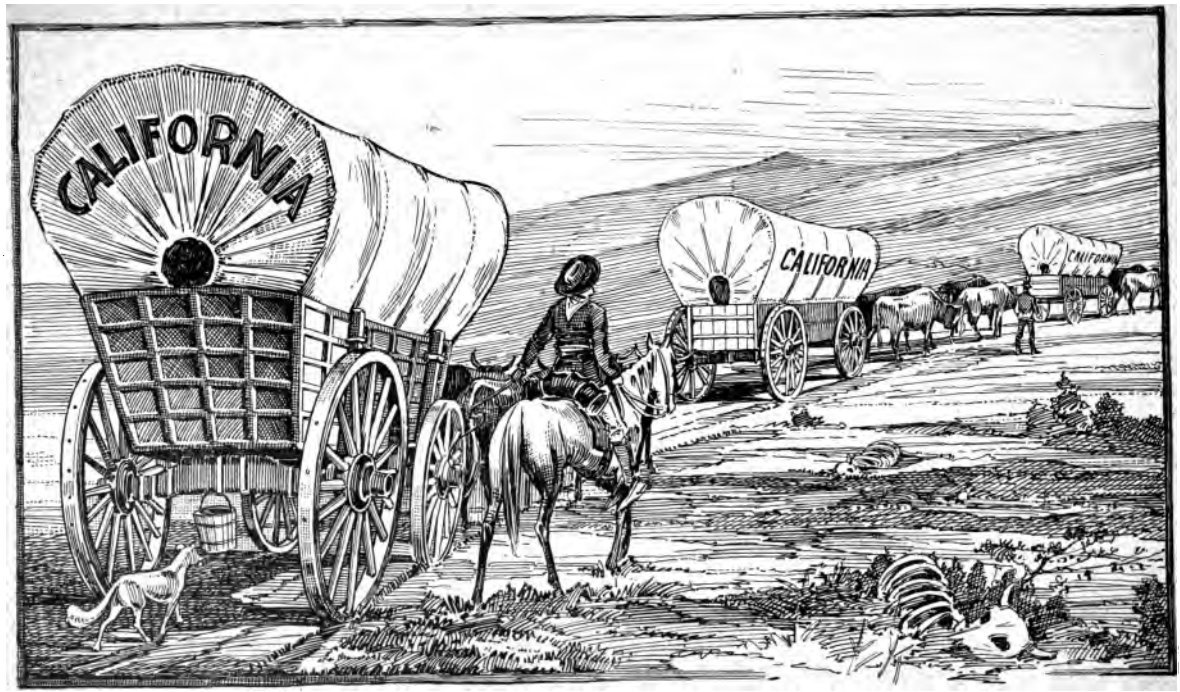
them and civilization, and bear, elk, deer and other game was becoming exceedingly scarce compared with the vast numbers in the country when he first took up his abode in it. In fact, after 1832 he never was thrilled by a war-whoop, and in a whole year not half a dozen strolling braves would be near his home. He began to suffer with depressing loneliness, and to pine for the dangerous and exciting adventures which had given such stimulating zest to his earlier manhood.

About this time news came from some old acquaintances who had made the commencement of a settlement just west of the Missouri river, and where the city of Lexington now is. They told of a genial climate, boundless pastures, treeless plains, the most fertile soil, excellent water, and just as much room for spreading out as the most ambitious pioneer could reasonably desire. The fair picture captured the fancy of Captain Harlan, and he commenced preparations for changing his abode, undeterred, but rather incited thereto, by the known and unknown dangers and obstacles he was told must be encountered on the long and toilsome journey. The facilities for communication with his daughter Polly, since her removal to Michigan, had been of the worst. A letter to or from her was a rarity. Yet he managed to acquaint Peter Wimmer with his intention to remove to Missouri, and to urge him and Polly to join him there. Needless to say Polly frantically favored the reunion. The unchangeable affection existing between members of pioneer families has been remarked by every one as especially emphasizing the truism that "blood is thicker than water." Wimmer sold his homestead and journeyed west, arriving

at the Missouri settlement almost simultaneously with his father-in-law, Captain Harlan. This was in 1837, and, as nearly all the land was subject to entry, he was not long in selecting a promising homestead, and it was done with the feeling paramount that, please God, here he would end his days. That "man proposes and God disposes" was as true then as it is now and ever has been.

A fact strikingly apparent to every one acquainted with the early settlement of this country was the possession by every pioneer of two supreme governing sentiments—love of country and belief in God. In defense of these all were ready to yield up everything, life included. They may have been illiterate, but all acknowledged the greatness and goodness of Jehovah —God everywhere. Not one in one thousand of those who laid the foundations of these mighty States, who fashioned the giants of the forest into hospitable homes, ever doubted the illimitable power of God, or questioned the absolute dependence of every living soul upon His omnipotent decrees. A detail of the customs of one pioneer settlement will fairly describe the course pursued by the builders of every new community between the Atlantic and Pacific oceans. All made haste to bend the reverent knee in earnest supplication and thankfulness to the King of kings.

From the nature of things it was impossible for a handful of unsheltered settlers to at once erect a house of worship; but with one mind, male and female, they began a search for the most beautiful and picturesque spot in the neighborhood, and always convenient to a spring or stream of pure water. There rough seats were provided and an arbor erected, under which they



Harlan's Band.

might join in praise and devotion when the weather was mild. They were not bigoted or sectarian. Every one was granted the widest latitude, and a visiting minister of the Gospel was heartily welcomed by all without inquiry as to his denominational predilections. When the weather was bad, should a preacher come into the settlement, some pioneer's cabin became a temporary church. Many eloquent and comforting sermons have we heard preached in the cramped limits of a frontier cabin, and every hearer honestly believed that "where two or three were gathered together in His name, there would He be in their midst," and with the same willingness and power to bless as though they were in the grandest temple ever erected in His honor.

We cannot doubt that God has directed and controlled the destinies of this favored land ever since Columbus discovered the soil. He has guided and prospered the people—a veritable protecting "cloud by day and pillar of fire by night"—to an extent never enjoyed by the children of Israel in their day of greatest strength and glory. We have legitimate authority for claiming to be specially "God's people," dwelling in "God's own country." Some honest, earnest, but unthinking persons have declared that God is not in the American Constitution. They are mistaken. If ever a document bore the unmistakable evidences of Divine inspiration it is the immortal deed securing to this people a "more perfect Union" than a "perpetual Union," and guaranteeing to every citizen the right to worship the Creator according to the dictates of his own conscience, forever secure from interference by any power on earth. God is there and the wisdom and

strength, born of His blessed omnipotence, breathes forth from every line of the Sacred Charter. From ocean to ocean comprises one vast temple, dedicated to the acknowledgment and worship of the ever-living God, and those who do not feel this sacred fact in the intellectual atmosphere of every community sadly misconceive the hopes and aspirations of the American nation.

The members of the Harlan settlement in Missouri took an early opportunity to select and dedicate the loveliest and most romantic spot in the vicinity as a place of worship, and where the settlers might assemble whenever there was any question of general interest requiring consideration. It was close to a spring near the bank of the Missouri river, the waters of which have been dyed with Union and Confederate blood, as the soldiers under Colonel James A. Mulligan, of Illinois, on one side, and General Sterling Price, of Missouri, on the other, contested to the death for the exclusive right to its clear and sparkling water. Gallantly the handful of Illinois boys made the siege of Lexington memorable by their stubborn defense of the right to use the water of this historical spring, and as gallantly did the Confederate boys lay down life to obtain the coveted possession. Finally, the spring and camp passed to General Price by a surrender, but as a testimony of his high respect for the brave men with whom he had been contending, Colonel Mulligan and his entire command were permitted to go to their homes on parole—a course very seldom pursued toward defeated opponents by either side, in any war.

To return to the members of the Harlan settlement: A commodious arbor was constructed and covered with

boughs of trees until it was impenetrable to light showers of rain. Timbers of considerable size were split in half, and one side of the slab was hewed smooth. These were arranged conveniently for seats. Then in front was erected a platform, with a rough but serviceable table for the accommodation of the preacher, or any one who should desire to address the assembled settlers. To repeat, this was but a crude Temple of the Most High, with its counterpart in every pioneer settlement in the land; but every fair Sunday it was filled with as devout an assemblage of worshipers as ever congregated in any city church.

The first one to occupy this sylvan pulpit was Deacon William Smith, a divine from Virginia who had wandered to the far West bearing the banner of the Cross, and striving to do good to his fellows. He realized that times come to all, and to dwellers on the frontier more frequently than to others, when human sympathies fail to give consolation, and the weary soul longs for Divine help. He was here to comfort the yearning mourners, and point the way to the Great Helper. His flock was widely separated, but he visited, advised with, and comforted as many as he could reach, and he exercised a marvelous influence in bringing together the persons through whom the first discovery of gold in California was accomplished. The readers of this true history will all agree that "God works in a mysterious way, His wonders to perform," and yet the seeming impossibility of intimately connecting actors so widely separated, and with apparently divergent interests, is brought about by means so natural and simple that one seems to feel that it would have been utterly impossible for the

course of these lives to have led elsewhere or have resulted differently. So does the Ruler of worlds work out most all important events.

CHAPTER V.

ORIGIN OF THE "F. F. VS."

Martin Cloud was a tobacco planter in Franklin county, Virginia, and from 1820 to 1836 was considered among the prosperous. He had a large plantation, and owned a considerable number of healthy and contented slaves, to whom he was a kind and indulgent master. His family at that time consisted of a wife, two sons, one daughter, Elizabeth Jane, born June 18, 1820, and all the slaves might be included, because in many respects they were treated as affectionately as the other members of the household.

Martin Cloud was a man of strict integrity, conscientious in the performance of all the duties required of him as a citizen and a member of the Methodist church. He was charitable to those needing aid, and his well-known kindness of heart was sometimes taken advantage of by the unscrupulous. Strong in the knowledge that to benefit himself by a wrong was in no degree a temptation, he was loth to believe that others could practice deceit. In an evil hour, a man named John Risley, from the State of New Jersey, applied to him for the position of overseer. Risley was shrewd and unscrupulous. There used to be a saying that a man "Jersey born and Georgia bred would shave a face of clay," meaning that he possessed less principle than keenness. Risley was keen and politic. He claimed

to be an expert tobacconist, thoroughly acquainted with its cultivation and cure, by improved processes, with which the Virginia planters were unacquainted. Besides he claimed to be expert in the management of labor. He sounded his own praises until he convinced Martin Cloud that he would be a valuable man to be connected with, and that his assurance that he could double the income of the plantation was more than probable. Having created this impression, so necessary to the success of his swindling schemes, Risley announced the only terms upon which he would give Cloud the benefit of his invaluable services. He must be an equal partner in the land and slaves, and for this half interest he must be allowed credit. The sale was made, and the management of land and servants was surrendered to the practical control of a man who was naturally cruel and tyrannical, and always a scamp. This was a sad day for the slaves, who had never experienced any of the cruelties which made the lives of some slaves unendurable. Risley selected a negro called big Dave to do the whipping, and for the slightest fault the negroes were subjected to merciless inflictions of the lash. A center post in the tobacco barn was where the slaves were tied and the lash applied until Dave and his barbarous master were satisfied. This unnecessary cruelty was as painful to Martin Cloud and his pious wife as to the colored victims, but they were powerless to prevent the whippings. One day Jennie's maid, Betsy, had displeased Risley, and he ordered her to the whipping post. Little Jennie reached there before the punishment commenced, and falling on her knees, she begged Dave to spare Betsy and punish her. Dave answered:

"Fore God, Missey, I'd rudder be beat myself dan strike a lick atter de little angel had told me not to. Massa Risley is welcome to whip me for not whippin' Betsy, but I won't do it."

Little Jennie was shrewd beyond her years. She told Dave to make the lash crack around the center post, and she and Betsy would scream at every blow, until Mr. Risley would think that Betsy was getting far more than he pretended she deserved. The plan was carried out, and it is certain that Jennie and Betsy performed their part in fine style, making more noise than would have been called for if the lash had been applied to Betsy instead of the post.

But other evils followed the new management. The flush times on the lower Mississippi, when the most careful went wild in senseless speculations, had been followed by the inevitable reaction and the depressing influences extended farther than had the previous expansions in business. Every interest in Virginia was affected, and the planters suffered equally with merchants and traders. The times were undeniably "hard." Money was scarce, and individual credit a thing almost unknown along in the year 1837. To render the conditions worse, crops were short, and the price of tobacco low. The large indebtedness contracted by Risley, and against the protests of Martin Cloud, could not be met without sacrificing the plantation and most of the slaves. Martin Cloud made no contest. He had acted unwisely in putting so much authority into the hands of an unknown man, but he recognized and accepted his responsibility, by selling all he had and paying every obligation. When this had been accomplished, pride or hope inclined him to

seek a new home, where he could build afresh, and possibly accumulate competency for old age, which was stealing on apace. We do not know that Martin Cloud claimed to belong to the "F. F. Vs."; but it is certain that no man was held in higher esteem by his neighbors, and no family commanded a sincerer sympathy from all who knew them than the family of Martin Cloud in their undeserved change of circumstances.

At that time, all the gold produced in the United States was found in northeastern Virginia, in North Carolina and in northern Georgia. A mint was established at Dahlonega, Ga., about this date, as the mines of Georgia were producing more abundantly than those of Virginia and North Carolina, and because there was no mint nearer than Philadelphia, and it was more dangerous to carry gold nuggets and dust across the mountains of East Tennessee and Virginia than it has ever been to transport gold anywhere on the Pacific Coast. There were no responsible express companies, and stage lines were few and far between. The Georgia output was nearly all from placer mines and the beds of creeks and rivers.

Procuring a wagon and two yoke of oxen, Martin Cloud loaded up with such things as he had preserved from the wreck of his fortune, and in June, 1837, left with his family for Lumpkin county, Georgia, where he determined to try to retrieve his losses in a search for gold. The trip was tedious, and it was August before he arrived at his destination. Jennie was then in her seventeenth year, a healthy and blooming brunette, with lovely blue eyes, a peculiar combination always said to be charming. She was fairly educated for the time

and was as hopeful as the young ever should be. The fact that she would have to work, which had not been required of her in the Virginia home, gave her no concern. She was ready to share the family fortunes, and make home as happy as she possibly could. The feeling was shared by her father, mother and two brothers, and their advent into the mining camp was hailed with delight by all who were engaged in fortune hunting. The father and boys found employment at once, and Mrs. Cloud and Jennie added materially to the family income by conducting a miner's restaurant and boarding-house. The new life soon became as pleasant and cheerful as that to which all had been accustomed. Thus was spent the fall of 1837, and Jennie Cloud was being prepared by experience for the important part she was destined to play later in the canyons of California.

We have said that we have no knowledge that Martin Cloud claimed to be a genuine "F. F. V." He used to repeat a tradition which was given as the true origin of that term. In the early days of the Virginia colony female emigrants were a rarity. The sexes were a long way from equality in numbers. The males had to depend for a wife on the supply of females sent out from England by speculations. These were held at high prices—500 pounds of tobacco a head. They were taken at that price very readily. Later new dealers came into the market, and the supply became much larger. The price fell. A buxom wife could be bought for one hundred pounds of tobacco—the legal tender of the commonwealth. Then classes in rank were established. The descendants of the women costing 500 pounds of tobacco each were the F. F. V's—members of the exclusive "400," as it were—and those who brought only

100 pounds of tobacco were always known among the colored folks as "poor white trash." We do not vouch for the correctness of this legend. We do know that whole communities in the South held families in great contempt who had never owned a slave.

CHAPTER VI.

"LO! THE BRIDEGROOM COMETH."

The two years spent in the mines of Northern Georgia were generally improving to the family of Martin Cloud. Gold was found in the soil, and in all the rivulets and streams entering the Chatahooche river from the North Carolina line to Marietta, in Cobb county. The quantity found was very small, and generally fine gold, but there were traditions of large nuggets, worth a small fortune, having been picked up by Indians, or some person who was not seeking gold. The possibility of more of these desirable nuggets being still in the sand and gravel kept the interest alive, and made the mining business intensely exciting. Jennie Cloud was the acknowledged belle of the camp, entering heartily into all the innocent amusements; but she developed a wonderful instinct for discovering rich dirt, and soon became a star "prospector." All the time not required to assist her mother, or in visiting and nursing the sick in the families of the miners, was spent in the gullies and hills looking for pay dirt. The returns in gold were not large, but the explorations gave great satisfaction and paid abundantly in experience.

The mania for gold has no counterpart. Of anything else known one may obtain "enough." Of gold, the more one has the more one wants. The names of those who have acknowledged themselves satisfied, and acted up to the acknowledgment, from the beginning of the world until now, could be told off on one's fingers. Retired gold hunters are scarcer than hen's teeth. Miners may abandon the mines because the labor has got beyond their strength, but they persistently continue the chase for gold in some other avenue. Every intelligent human wants gold. "The love of it," as the well-paid preacher declares, may be "the root of all evil," but the one who loves it not is beyond the capacity of caring for anything. Those who have no hope of possessing gold themselves, delight most in hearing and reading about it. It has been so always, and will remain so until all humanity has reached that heaven whose chief attraction is its streets paved with "shining gold."

Jennie Cloud was one of those hopeful, contented souls who are never despondent. If the find was small to-day, to-morrow would be more generous. Her buoyant spirits encouraged every one who came under her influence. She could have had her pick and choice of the stalwart young miners. Not one of them could claim that he was preferred to others. To all her presence proved a blessing.

The winter of 1839–40 was a severe one for the miners of Northern Georgia. It was not alone that "hard times" prevailed throughout the whole country, but the winter was an unusually wet and disagreeable one. In all the gulches there was almost continually too much water for profitable mining, and colds were prev-

alent, and of a specially virulent type. In nearly every family some member was seriously ill, and in some families there were not enough well ones to give the others proper attention. Under such circumstances the noble characteristics of Jennie found ample scope. She would visit, cheer and nurse the sick, and was nearly always supplied with delicacies for her patients which she had prepared with her own hands. Her constitution was splendid, but the unfortunate result which might have been expected, followed her untiring efforts in behalf of her neighbors. In January, after continuous exposure to the inclement weather, she was stricken down, and her grief at being denied the privilege of ministering to her sick friends, made her case more serious than it would otherwise have been. She was soon delirious, and spent hours in repeating consoling and encouraging words to those she had been in the habit of nursing. Now she required constant care and attention, and all the young folks, male and female, were ready to contest for the privilege of watching with her. Obadiah Baiz, a young man but a few years her senior, and who had long viewed her with feelings of earnest love, would not be denied the sad pleasure of constant and never-wearied watching. Young Baiz had no superior in the mining districts for moral rectitude, manly honor and good looks. In her heart, Jennie had long harbored the hope that Obadiah would declare the love which his respectful attentions to her indicated that he really felt. He had been a welcome visitor at her father's house, for even his jealous solicitude for her welfare could find no objection to the marked attentions of a young man so thoroughly worthy as young Baiz. During her delirium, and

while convalescing, Obadiah established himself beyond question as her devoted and willing servant. As health returned, many opportunities were utilized in making each other acquainted with all the hopes and aspirations of two loving hearts, and it was found that for many months these had beat almost as one. When Jennie was able to welcome her many friends, they readily surmised what she as readily admitted—that she and Obadiah Baiz were betrothed, and would unite in marriage sometime during the year.

About this time Mrs. Cloud received a letter from her brother, Deacon William Smith, who had been doing missionary work in Northern Missouri. He was enthusiastic in his descriptions of that promising country, and named the "Harlan Settlement" as the most desirable section he had found in all his travels. His descriptions of the rich and boundless prairies, watered by many streams and rivers, and the endless pastures for herds of cattle and droves of horses and mules, and which could be had without money, and at no other expense the year round than changing the stock from one free pasture to another, were decidedly enchanting. The Cloud family began to discuss the propriety of making another and longer move than the one from Virginia to Georgia. The gold mines did not give more than a hardly earned sufficiency for the ordinary requirements of the miners. There was no immediate prospect of work in the mines becoming any more remunerative. As a matter of fact, the provision for old age was not "in sight" by a long ways, and the mining claims seemed a very doubtful reliance for any such provision.

Jennie did her best to encourage the hope that there

was a brighter day coming, but even her hopeful disposition could not fix an early date for its arrival. The ways and means were still being discussed by the family when a second letter from Uncle Deacon Smith, far more highly colored than the first, about decided Martin Cloud to become a pioneer. Obadiah Baiz, as was his right, had been cognizant of all the discussions held by the Clouds. He was clear headed and conservative, and was slow about advising a move which was so important, and might be attended with dissappointment and even disaster. After the arrival of the second letter, written by a man of the high character of Deacon Smith, all hesitation disappeared from the mind of Baiz, all the dangers being resolved into the mere difficulties which would attend breaking up housekeeping in Georgia, and living for a few months in ox wagons on the road to Missouri. He became urgent for an immediate marriage with Jennie, so that he could join in the emigration as her special protector, and take away the monotony and weariness of the journey by making of it a honeymoon outdoor pic-nic. The conversion of Baiz from his non-committal position to an energetic advocate for removal settled it, and preparations for the wedding began. The day was set, and the circuit rider was notified that his services would be required on the 25th day of April, 1840. In the meantime everything was being prepared for the comfort of the emigrants.

Weddings were not every-day occurrences in Georgia, and not more than once in a generation were two as popular young people as Obadiah and Jennie joined in holy wedlock. Besides, the fact that the honeymoon was to be spent on a journey which all felt was

extremely perilous, added greatly to the interest and romance of this particular wedding. After the congratulations, and before these had been well digested, must come the parting which the most hopeful acknowledged would be for aye.

Old Aunt Sally Stevens was an autocratic authority in that section on barbecues, pic-nics and wedding feasts. With efficient and obedient aids the old colored cook could provide a feast for a county. Aunt Sally was installed as chief of the kitchen, and was promised fat shoats, a lamb or two, and all the chickens, butter, eggs and sweet potatoes which she might require. As it was getting late in the spring Aunt Sally was a little doubtful of obtaining the principal ingredient for the delicious and satisfying potato custard, but several volunteered to furnish the potatoes they had reserved for seed, and Aunt Sally was satisfied. Never before was there such preparation for any event in Northern Georgia. If a Fourth of July and Christmas, supplemented by a circus, could all have been promised "under one tent," there could not have been more anxious expectations. There was no mailing of special invitations. Everybody was expected, and they knew their welcome would be as honest as it was earnest.

The morning of the great day came. It is a tradidition in the South that May day is bound to be rainy and Fourth of July always fair. The twenty-fifth of April was a Fourth of July in clearness and a May day in temperature. Very early the crowds began to assemble, and they included old and young, and servants as well as masters and mistresses. That was a custom usual in slave times. Betimes the bride and

groom appeared arrayed for the occasion. Neither wore "store clothes." Every article was home made except the ribbons and high comb with which the magnificent abundance of Jennie's auburn hair was held in place. The richly colored pressed flannel dress from a country loom, was as becoming as any trousseau ever prepared by Worth, and the hand-made lace with which her white scarf was trimmed would rival in value and beauty any from the looms of Lyons. A bouquet of fragrant flowers gave employment to her hands. Obadiah Baiz, in his closely fitting suit of home made jeans, resplendent with brass buttons, was the proudest man in Georgia, and took his seat beside Jennie with the dignity and courtesy of a prince.

Promptly at 11 o'clock the minister arrived. He was dressed in a swallow-tailed coat, high standing collar held in place by an old-fashioned stiff stock which kept his chin well up, and made him appear many times more dignified than the occasion demanded. He walked immediately in front of the blushing couple and ordered them to stand up and clasp hands, and the interesting ceremony from the Methodist ritual was quickly said, and Obadiah Baiz and Elizabeth Jane Cloud were pronounced man and wife, with "what God has joined together, let no man put asunder." Then followed caressing and congratulations without cessation until the dinner horn sounded. Parson, bride and groom, and all the guests proceeded to a little grove a few yards from the kitchen, where Aunt Sally and her assistants had spread a feast that was creditable to her skill, and equal to the importance of the occasion. Before being seated, the minister asked an eloquent blessing upon the feast, upon every guest,

and especially upon the lovely couple who had just put up vows to "love, honor and cherish," and who were so soon to depart to a distant land in obedience to the command "to increase, multiply and replenish the earth." Then the feast began, and when the multitude were satisfied there were more than five basketsful remaining for the use of the servants, and to be sent to those in the neighborhood who were unable to come.

On the 10th day of May, 1840, Martin Cloud, his wife and two sons, and Obadiah Baiz and Jennie bid a final adieu to their friends in northern Georgia. Since the wedding they had sold out their mining claims, implements and such goods as could not be packed in two large covered wagons, and still leave room for sleeping quarters in case of rain. A few rules had been decided upon for the prosecution of the journey, the most important of which was that the travelers should remain in camp from Saturday night until Monday morning. Not a wheel should be moved on any Sunday during the trip. On Sunday the oxen as well as themselves should devote the time to rest and recuperation. Bearing with them the good wishes and sincere prayers of all their old neighbors, they started for the distant West hopeful and happy.

CHAPTER VII.

ACROSS FIFTEEN HUNDRED MILES OF WILDERNESS BEHIND OXEN.

In 1840 it was more than fifteen hundred miles from Lumpkin county, Georgia, to the "Harlan Settlement," now Lexington, Missouri, by any route that could be

traveled with a wagon. The Cloud party selected a longer route than needful, so as to cross the Mississippi river at Cape Girardeau, Mo., and make the trip up the west side of the Missouri river. It is a long ride to-day by rail, and across the States of Tennessee, Kentucky, Illinois, and almost the entire length of the State of Missouri. Let those possessing the most fertile imagination attempt to measure the courage and energy required to enable one to make this journey in an ox wagon when the whole length of road was through an almost unbroken wilderness, or across trackless plains. There was scarcely a traveler to be met on the long route, and no knowledge of ferries, divergence of trails, or difficulties and dangers in the way, could be obtained by other than actual experience. These facts taken into consideration, and the reader is better prepared to estimate the endless resources with which every member of a pioneer party had to be equipped to overcome obstacles and avoid disaster.

The Cloud party met with no remarkable incidents until the Mississippi river, opposite Cape Girardeau, was reached. They had taken up the march at the season when the woods and plains were carpeted with vernal green, and the oxen could satisfy hunger in a few hours on the rich grasses. The nights were not cold, and the days were generally pleasant. There was nothing really disagreeable in camping out, and every scene was new and interesting to these life-time residents of the older sections of the Union.

When the Clouds reached the Mississippi river, near the end of June, the melted snows of the Rocky mountains, assisted by heavy spring rains, flooded the river,

and its current was filled with driftwood—whole trees and giant logs. The only means of crossing at Cape Girardeau was in a plank boat, propelled by man power, using a heavy oar on each side to give the boat headway, and an oar at the rear which answered the purposes of a rudder. It was ten days before the river had commenced to fall, upon which event the islands of driftwood would begin to disappear from the current. Until then the experienced ferrymen knew it would be next to impossible to make a crossing, and absolutely impossible to make a crossing devoid of danger, and they refused to attempt to put the Cloud party across the river at any price. Patiently as they could they awaited the subsidence of the flood. Finally they were notified that the ferrymen would undertake to land them and their possessions in Missouri, but that two days would be required to convey everything across. The first day was spent in crossing the wagons, yokes and chains and other goods, with Martin Cloud, his wife and two sons. Obadiah Baiz, Jennie and the eight oxen had to wait until the morrow. Only four oxen could be taken in the boat at one trip, and Obadiah accompanied the first load, leaving Jennie to watch the remaining four oxen, and make the final trip in the afternoon in company with them. As there had so far been not a suspicion of danger or accident, no fear of any trouble was apprehended. The last four oxen were in the boat, and two-thirds of the distance between the banks had been accomplished, when the three boatmen were startled by a shrill scream from Jennie—"Look out for the log." To make the crossing the bow of the boat was turned slightly up the stream, so that the current should not carry it below the landing. The huge

log and the boat had been nearing each other, the one impelled by the current, and the other by the strong arms of the ferrymen, who had not noticed the threatened collision until their attention was called to it by the frightened shriek of Jennie. Then it was too late to avoid the shock. The blow was disastrous. The oxen were all thrown to the upper side of the boat, which immediately filled and sank, and Jennie, the ferrymen and the oxen were in the river together. The mishap was witnessed from the bank by Obadiah and the Clouds with such agonizing terror as cannot be described. To afford help was beyond the power of any but God.

In this terrible moment Jennie was supplied with an inspiration which saved her life. She grabbed the tail of one of the oxen with a grasp as tenacious as life, and the faithful beast struck out for the distant shore. The ox swam low in the water and frequently Jennie would be submerged, and would think she was certain to drown. Before she was completely strangled she would get her head above water and would hear the screams of her mother and the encouraging shouts of her husband and father. And every moment the powerful brute was getting nearer and nearer to the loved ones and safety. These facts induced her to hang on with the energy and strength of despair. Persons resuscitated from drowning tell about vivid pictures of every incident of a whole life passing before their mental vision in the few seconds between being submerged and loss of consciousness. Jennie has frequently asserted that all the incidents of three lives—past, present and future—seemed to well up and become a part of herself. Finally the brave old ox, with his precious

charge, reached the shore. There were willing hands to help him to land, and to seize the apparently lifeless form of Jennie and bear her to a waiting cot. Very soon she returned to consciousness, and, except for the terrible shock, was but little the worse for this awful experience. Obadiah had given her up for lost many times during her passage to the shore. The time was short, but it was ample for him to enter into many silent covenants with God that if Jennie were spared every energy of his soul and being should be devoted to enhancing her comfort and happiness. These covenants were never forgotten or ignored by him in the future. As long as he lived his efforts were devoted to the happiness of the wife he had so nearly lost.

In a few days Jennie was entirely recovered, and her spirits were as buoyant as they had ever been in her life. The short delay had rested the entire party, and the faithful oxen were seemingly stronger and more obedient than ever. Then the hopeful party took up the line of march for the Harlan settlement, greatly encouraged by their unusually quick and successful trip to this point. There was a trail leading past Iron Mountain, and north of west to Lafayette county, in which the Harlan settlement was situated. This trail was frequently traveled by parties going to St. Louis, whether from the southeastern or northwestern part of the State. When our travelers reached Iron Mountain they were surprised by the vast body of ore which is there collected in one mass, and its apparent richness. Two pieces of ore struck together gave out the clear ring of two pieces of pure metal They marveled that such a ponderous deposit, of such richness,

had not been utilized to a greater extent. And visitors to Iron Mountain now would marvel not less than did our travelers in the summer of 1840. An opening had been made near the top of the mountain, four or five hundred feet from its base. For more than fifty years ore approaching closely to pure metal has been mined and the excavation made in all these years would be more than filled by any one of many of the business blocks in any of our large cities. The St. Louis and Iron Mountain railroad skirts the base of the mountain. Across its track, and not more than a mile from the mountain proper, is a vast deposit of very rich magnetic ore. Surely in these two deposits there is enough raw material for all the street rails and steel vessels that the United States may have use for in ages to come.

Our party left St. Louis to its right, and passed on by easy stages to its destination, arriving there early in October. The political campaign was at its height. "Tippecanoe and Tyler too," was the popular ticket. It was specially popular at the Harlan settlement, for Captain Harlan had shared the dangers met by Tippecanoe in all the wars on the frontier. He was an enthusiastic admirer of his old general, and believed that opposition to him for president was a species of high treason. Political meetings—Harrison ratifications—were of frequent occurrence. The last and most important was to be held just about the time our travelers would reach the settlement. Their coming was wholly unexpected. They never had acquainted Deacon Smith of their intention to remove to Missouri, and as luck would have it, he had been selected to deliver the speech of his life at this great Harrison rally, and the speech was to be followed by a grand barbecue, for

Harrison was a real "F. F. V." Deacon Smith was early on the ground, and from every quarter of Lafayette county came enthusiastic crowds with waving banners and tumultuous cheering. Before the speaking commenced, two wagons were seen approaching which bore the unmistakable marks of having made a long journey, and were instantly recognized as belonging to a band of home hunters. Deacon Smith and all the others approached to bid the travelers welcome, and promise them aid and sympathy. His astonishment and delight at meeting his sister and her husband and family came near disqualifying him for the position of orator of the day on this great occasion. However, after the necessary hand-shaking and congratulations, the unexpected reunion had the effect of clearing his brain and inspiring him with a flow of language and a volume of convincing arguments, which he delivered with an eloquence that captured the last Van Burenite who had risked his democracy by attending this meeting.

The reception of the newcomers was most cordial. The new settlement had every thing desirable but people, and the families of Martin Cloud and Obadiah Baiz were recognized as a great acquisition. Deacon Smith had become highly popular, and these relatives of his got the benefit thereof.

CHAPTER VIII.

TO THE SETTING SUN.

The site chosen for the Harlan settlement was one of the most attractive in the State of Missouri. In 1840 the population of the whole State was only 383,-

702, and Lafayette county contained more deer, buffalo and elk than inhabitants. But the coming of settlers, and the prosperity they would create, was only a question of time. The soil was adapted to the growth of everything produced in the temperate zone, and the yield of tobacco and hemp had proved far beyond that obtained in Kentucky, Viginia or Maryland. These were the only products which, at that time, could be depended upon to bring ready cash, or, at least, the only articles which would return a good profit after paying for transportation and brokers' commissions. The settlers up to date were all honest and thrifty, and others were coming in every week from the South and East who would have been welcomed anywhere. Many from the South brought their slaves, and the plains were being transformed into orchards and fields of waving grain. The meeting place at the spring was still retained for the uses of the settlement, but schoolhouses and churches began to take the place of arbors. The various neighborhoods were getting dissatisfied with having to depend wholly upon the Harlan settlement for a place in which to assemble. During the next three years there was not a hint that any one of the settlers was not there to stay. It seemed to be just the spot all had been longing for, and fitted to fill every human requirement. The section was unusually healthy until 1843. Then the ague seemed to become epidemic, and of a most virulent type. Now the medical profession would give the complaint some other name, but then it was known as chills and fever. It was in nearly every family.

The members of the Harlan settlement were largely related, either by blood or marriage. They were a

social people, and met nearly every Sunday at the arbor, or wherever there was preaching, and as frequently as possible at each other's homes. The families of Peter Wimmer and Obadiah Baiz were on adjoining farms, and they were congenial in their tastes, and specially friendly in their associations. Either was always ready to help the other, and the frequency and freedom with which small services would be asked, and the promptness and pleasure with which they were rendered, can only be understood and appreciated by pioneers. Great services would have been performed with equal promptness. The family of Wimmer now consisted of Polly and five children, and that of Obadiah Baiz had been increased by two lovely children since he and Jennie left Georgia. In the late summer of 1843 both families were sadly afflicted. Obadiah Baiz, so long in the enjoyment of perfect health, was stricken with the prevailing fever. About this time Polly Wimmer was taken down with the same complaint. All that affection could do was done for each, but during the fall both died, leaving two sadly bereaved households. It was not in the nature of Peter Wimmer to repine, and his attentions to his motherless children became redoubled and more affectionate. The grief of Jennie Baiz was very great, but it was lessened by the necessity for the care of her two little ones. The intimacy of the two families was increased. Jennie could perform very many necessary services for the little helpless Wimmers which Peter was ignorant how to do; and a thousand things about the Baiz homestead required the strong arm and experienced brain of a man. Even their mutual afflictions increased and strengthened the bonds of friendship.

Having known the departed ones so intimately, none other in the world was so qualified to console, as were these two to comfort each other. Together they decorated the tombs of the loved and lost with flowers, and together they communed of all the hopes and expectations which had been buried in the grave. Each had been given such consolation as their friendly neighbors could bestow, but their mutual condolences seemed more genuine and comforting because each knew the bereavement of the other's heart by the poignancy of its own grief. The end of these intimate relations the reader has already surmised. After a year of mourning and loneliness, a wedding gave Polly Wimmer's five children an affectionate mother, and the two orphans of Obadiah Baiz a Christian father. All their acquaintances joined in congratulations, because they knew the sterling worth of each of the participants in the marriage obligations, and that from every point of view a more wise and commendable arrangement could not have been made. It was a marriage of affection as true and deep as though neither had ever loved before, and could be consummated without disloyalty to their former companions. But more: this wedding was in accordance with the decrees of Providence, as was the educating incidents Jennie experienced in the ravines and gulches of northern Georgia. Both were necessary preliminaries to the discovery of gold in California.

The new graves in the cemetery on the hill-side overlooking the Harlan settlement, combined with a restlessness which was growing upon Capt. George W. Harlan and some of the other pioneers, and which might be traced to their natural desire to be "moving on"

—to be planting other foundations for prosperous communities—had induced a considerable number to talk of going west. The settlement was not far distant from Fort Independence, the point near the Missouri river at which all the trappers and hunters in the employ of the American Fur Company, and all the traders from Taos and Santa Fe, in New Mexico, and other points in the Rocky Mountains and beyond, came for supplies, or to take boat for St. Louis. The stories told by these brave adventurers, many of whom knew little of English and less of civilization, were far too rose-colored to be believed in their entirety; but enough was probably true to quicken the pulses of men who had never known any existence but that of frontiersmen. Especially glowing were the descriptions of California. These were mainly corroborated by the lately published story, "Three Years before the Mast," by Dana, of Boston, a copy of which had found its way to this backwoods settlement. Captian Harlan exercised great influence over the honest settlers, all of whom had perfect confidence in his judgment. He was early determined to know more of the land of perpetual summer if he lived long enough to make the trip. Every story from the Pacific was listened to with avidity, as they are to this day, and at the Sunday gatherings, and whenever there was a visit exchanged, the main subject of talk was California. The war with Mexico was then fully determined upon, the election of James K. Polk having shown a majority of the people in favor of assisting the Texans in sustaining their right to independence. A large portion of the settlement were conservative, and argued that Lafayette county was plenty good for any one, and that it was wise to "let well enough alone."

They wanted none of California, or any other place in the Rocky Mountains or beyond. This gave the question two sides, with earnest defenders of each, and the discussions were constant, generally friendly, but sometimes decidely warm and exciting. During the year and more that this was the prevailing subject of talk in the Harlan settlement, the citizens of Hancock and the adjoining counties in Illinois had killed Joe Smith and some of his followers, and had determined that all the rest should leave Nauvoo or meet a like fate. The Mormons had previously been driven from Missouri, and knew they were too few in numbers to establish themselves in the vicinity of civilized communities, and in 1845 had passed by Fort Independence on their pilgrimage to the desert. It was known they had made a stand at Salt Lake, and Captain Harlan insisted that if these ungodly persons could make the trip Christians need not fear to undertake it, and a considerable number of his hearers agreed with him, so that towards the fall of 1845 quite a company had decided to journey to the Pacific with all they possessed, including wives and little ones. In fact, it was settled and understood that they would take a last farewell of every relative and friend who did not accompany them, or who should not follow later on. A possible return was not thought of by any one.

It having been settled that the move would be made, preparations were commenced. All who had decided to join Captain Harlan were practical and experienced men. They had made long journeys, but heretofore settlements were not more than a few days' journey apart. Now they all knew that after leaving Fort Independence no settlement of whites would be

seen until the long and perilous journey was concluded.

When Deacon Smith learned that Peter Wimmer and Jennie, the Deacon's niece, had concluded to journey to California, he made no attempt to dissuade them. Rather, he gave them encouragement, accompanied with his blessing. He said to Peter: "You are undertaking a long journey. It is not probable you will ever care to return to Missouri. You probably have noticed that all persons, on hearing of a new country, immediately conceive a visionary picture thereof. In my mind I have such a picture of your California. I think it is a land flowing with milk and honey, and peculiarly blessed in soil and climate by the God we revere. I am sure it is adapted to the growth of fruits and flowers and vines, and that all manner of grains will grow there luxuriantly. I can not help imagining it much like the land of Ophir, whence, the Bible tells us, came the gold and precious stones which ornament the streets of the New Jerusalem. If I live until science has explored the valleys and mountains of California, I will be much disappointed if vast amounts of silver and gold are not produced for the use of man. I believe you have chosen well, and if I were younger would be tempted to join the Harlan band, and defy the perils of the dangerous journey."

The first care of the emigrants was the construction of wagons for the trip. As there were no boats or ferrymen on the route, the wagons had to be made strong, and the beds so nicely jointed that they would be water-tight, and would answer for boats when rivers had to be crossed. The covers were made of

superior tent cloth, impervious to dew or rain, and the tops of all provided for this band were uniformly painted a bright red. The side-cloths of every wagon cover had "California" in large letters painted on each. The wagons were all of extra size, even for "prairie schooners," and as perfectly constructed as skill of man, and fine workmanship and material, could compass. They were to be drawn by four yoke of cattle each, and two cows for each wagon had been broken to work in the yoke, so that the emigrants would not want for milk on the way. Indeed, provision was also made for a supply of butter. A churn was fastened to the outside of each wagon, and into this the surplus milk was poured; and the violent shaking it would receive in passing over the rough roads would produce an excellent article of butter. Every other article which experience had taught them would be required, was procured. Fresh meat they were sure to have in plenty, as the whole country through which they were to pass was alive with all kinds of game; and especially buffaloes, elk, deer and antelopes.

It was arranged that all who intended to join the "Harlan Band" should rendezvous at Fort Independence early in April, 1846. In good time Captain George W. Harlan, Jacob Wright Harlan, George Harlan, Jr., John Hargrave, Peter L. Wimmer, John Spence and Ira and John Van Gordon, with their wives and children, were in readiness. There were others, who, including the unmarried men, formed a party of eighty-four souls, and about one hundred wagons. The season was unusually late that year, and it was not deemed safe to make the start until the

grass began to appear. The company went into camp on Indian Creek, twenty-five miles west of Fort Independence, April 12, 1846. Other organized companies arrived at that point, until there were probably five hundred wagons, accompanied by some bands of cattle and a number of horses, which were being driven across the plains on speculation.

May first the Harlan band broke camp, and took the trail for the Platte river. A considerable number of adventurous Americans had already crossed the plains; but notwithstanding there was no road between the Missouri and Pacific which deserved any other appellation than "trail." The emigrants were mainly dependent upon notes made from information gained from trappers, and the very rough map which had been constructed to aid in the translation of the notes. It was very much like Columbus turning the prow of his vessel toward the center of the illimitable ocean, and trusting to God and his own courage and genius for the discovery of a route, and to meet and overcome difficulties. Like in his case, every provision had been made to meet emergencies which could be foreseen; but it was the vast unknown which might furnish insurmountable obstacles. In both cases there was indomitable courage, and it is said, and is undoubtedly true, that God smiles upon and blesses the brave, while He heartily despises a coward. Many years ago, using old Zephry Rencontre for an interpreter, we asked an Indian brave, who was decorated with scalps of many enemies, what was the unpardonable sin? Quick as a flash he answered, "to lie and be afraid." Civilization cannot furnish a better answer. Falsehood and cowardice are twins. The good and

truthful man has no call to be afraid of man or his maker, and our emigrants comprised as brave and true a body of men and women as ever embarked upon any undertaking inspired of God.

A stout windlass had been provided, and was taken along, which was to be used in forcing the wagon bed boats across rivers, and for drawing the loaded wagons up, and letting them down mountains, which were too steep for the strength of the ox teams to manage. Indeed, these pioneers anticipated finding precipices where even the oxen might have to be raised and lowered by man power, and the windlass and an abundance of strong ropes would be a necessity. They knew, before starting, some of the obstacles they were sure to encounter. They were practically the absolute vanguard of the immense emigration which took place a few years later. They were spared some of the terrible sights which shocked those who crossed the plains in 1852, and later, when almost every rod of the route from the Platte to Sacramento had one or more skeletons of those who had started with as brilliant expectations as any of our party; more brilliant, in fact, for inexhaustible gold mines were expected by those who left their homes in the East after the beginning of 1849, only to find the bones of the victims of cholera, and leave their own skeletons to increase the vast number of unsepultured dead, which strewed the plains all the long way.

The Harlan band was treated to the finest kind of weather at the start. The main trouble experienced was the frequent crossing of the Platte, which became dangerous at some places where the bottom was a bed of quicksands greedy for victims. In such places the

only safety was in goading the oxen forward. If they halted for a few seconds the hungry sands commenced to swallow wagons and teams. In one case, when Mrs. Wimmer was driving a team, a second's halt gave the sands time to grasp the feet of the off wheel ox with a death-like grip, and make it impossible for him to move. Each instant he was sinking deeper and deeper. Jennie sprang upon the tongue, and reaching the front, with voice and goad, she spurred the lead oxen, still fortunately free, to pull the fast disappearing ox from his dangerous position. Her self-possession and promptitude saved this ox, and probably the others from being swallowed up by the treacherous sands. Sometimes, in the sloughs and small streams entering the Platte, the quicksands were so plentiful that it was impossible to ford or ferry. Then the windlass was rigged, and the stout rope fastened to all the yokes and to the tongue, and wagon and oxen were dragged across by main strength. When unfordable rivers were met with, the windlass and ropes did service. A stout post was securely sunk on the bank, and the cable was fastened to that. Then the other end was taken across the stream by a man on horseback, and there fastened securely to another post. Then the crossing began in the wagon-bed boats, and generally two or three days would be consumed in ferrying the train across. This time was utilized by the women in washing and drying the clothing, and in recuperating the stock. It was a very tiresome way of making haste, but the brave pioneers made no complaint.

Thus the brave band worked its way across the rivers and plains to the base of the Rocky Mountains, at a place on the Sweet Water, which they named Indepen-

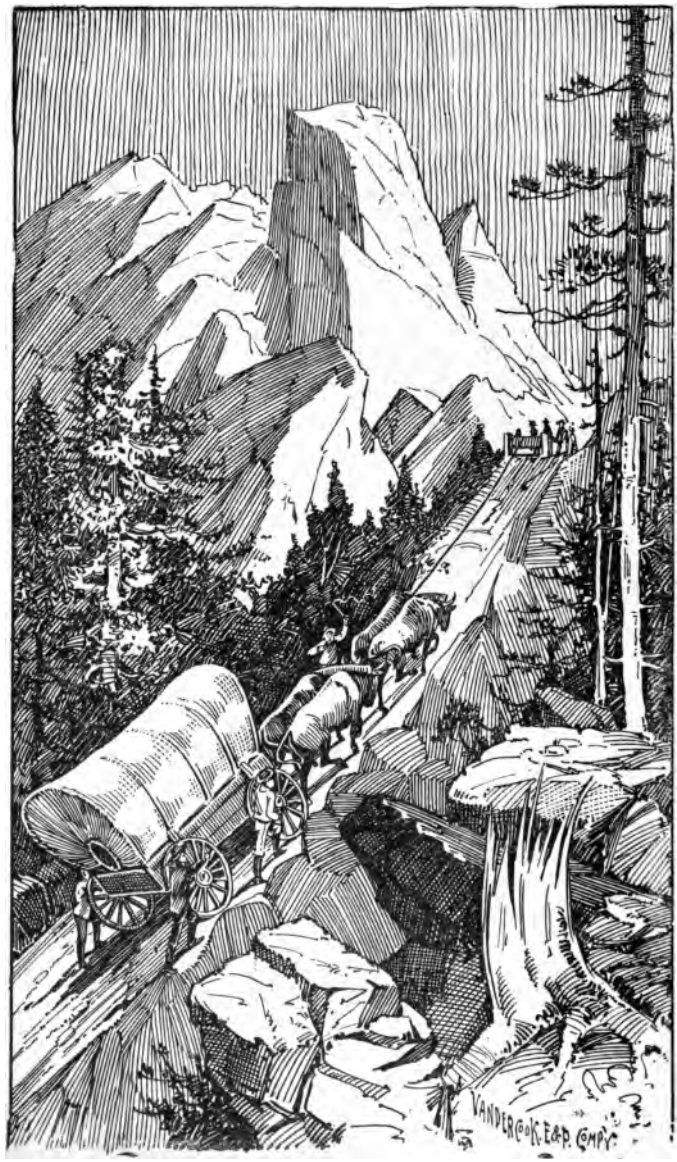
dence Rock, because there they celebrated the Fourth of July. Independence Rock has retained its name, and from 1846 until now overland emigrants have planned to reach that point for the anniversary of the country's natal day. Here, too, the plain is abandoned, and mountain and canyon, with their constant varying landscape, become a pleasure and excitement, for no one knows what magnificent views may be presented at the next turn in the mountain road. The celebration here was not merely a patriotic hurrah over the national greatness, and the extent and richness of the national domain. It was also an occasion of heartfelt thankfulness. Every member of the Harlan band who had started from Missouri was here to answer the roll-call, and there had been no indisposition of consequence experienced by old or young. The "cloud by day and pillar of fire by night," which signifies the protection of heaven, seemed to ward off sickness as well as other dangers, and our emigrants settled down contentedly for a three days rest.

CHAPTER IX.

ROAD BUILDING IN THE MOUNTAINS.

The halt of three days at Independence Rock was in some sort indispensable. Wagons and other things demanded repair, and the cattle were in need of rest. In all the long journey between the Missouri river and the Sacramento valley, the Harlan band halted nowhere more than a day, except at Independence Rock and Fort Bridger, and while John Hargrave lay waiting for death. Three or four days were spent at Fort Bridger,

and here information was received which determined some of the band to attempt a new route, while a number, including the ill-fated Donner family, concluded to stick to the old and longer trail, known as the Hall route. Captain Harlan had been assured that a long distance could be saved by following up the Sweet Water to its head, and there crossing the divide into Echo canyon. His information gave no hint of unusual difficulties in the way, and certainly none which could not be surmounted in a small part of the time which would be saved by taking the new route. Reid, the Donners and a few others, were opposed to "swapping horses in the midst of the stream," and stuck to the better known route, encountering such misfortunes as will be remembered as long as there is history of pioneer trials. The division somewhat weakened the band, and was greatly regretted by Captain Harlan and those who elected to try the new route. Few difficulties, greater than those heretofore experienced, were met with until the divide had been practically crossed, and the pioneers entered Echo canyon. Here trouble began. The canyon is scarcely wide enough to accommodate the narrow river which traverses it, and there was no room for roads between its waters and the abrupt banks. In many places great boulders had been rolled by the mountain torrents and lodged together, forming an impassible way until drilled and blasted into fragments which could be handled. Three such obstacles were encountered, and only about a mile a day was averaged for more than a week. The sides of the mountain were covered by a dense growth of willows, never penetrated by a white man. Three times spurs of the mountains had to be crossed by rigging the windlass on top, and



Hoisting a Team Up the Mountain.

lifting the wagons almost bodily. The banks were very steep, and covered by loose stones, so that a mountain sheep would have been troubled to keep its feet, much more an ox-team drawing a heavily loaded wagon. On the 11th of August, while hoisting a yoke of oxen and a wagon up Webber mountain, the rope broke near the windlass. As many men as could surround the wagon were helping all they could by lifting at the wheels and sides. The footing was untenable, and before the rope could be tied to anything, the men found they must abandon the wagon and oxen to destruction, or be dragged to death themselves. The faithful beasts seemed to comprehend the danger, and held their ground for a few seconds, and were then hurled over a precipice at least 75 feet high, and crushed in a mangled mass with the wagon on the rocks at the bottom of the canyon. The loss of the wagon was serious, but it was not felt as was that of the oxen, whose faithful service for so many weeks had endeared them to every member of the band.

Finally the mountain was crossed, and the band entered Salt Lake valley. So slow and toilsome, to say nothing of its dangers, had the latter part of the journey been, that members of the party compared the universal joy and rejoicing to what they supposed would be felt when the gates of heaven were opened for their entrance into the realms of eternal bliss. Even the cattle seemed to share in the general cheer. A camp was established in the edge of the valley, near the Jordan river, and all felt sure that the worst was passed. These were the pioneers, as the reader must remember, who were actually blazing out a route for the use of many thousands in the future. Their

information as to proper routes was meager, and in most cases lacked definiteness, and at every foot they were attacking the absolutely unknown. It is not strange that after the mountain mysteries, the luxuriantly clothed valley welcomed them as a paradise. For the first time in many weeks, there was music and dancing in the camp. Mrs. Jacob Harlan and her sister Minerva were expert violinists, and the character of music furnished the dancers was superb.

But the rejoicing was tempered by hard and careful work. The rough usage the wagons had received in the mountains had racked the wagon boxes until they were as worthless for ferry boats as a sieve would be. They all had to be carefully caulked, because the Jordan and other rivers were to be crossed. In due time all were again in perfect repair, and the Jordan river was crossed. Now came the saddest incident of the trip. John Hargrave had taken cold after a day of extra trying labor in the mountains, and it had fastened upon his system and developed into typhoid pneumonia. His sickness affected every member of the band, and the affection among whom could be measured by the serious dangers they had shared together. He was too sick to travel, and no one thought of moving a rod until he was well again. The delay troubled them not a little bit, but sorrow at the serious illness of Hargrave grieved every one of his comrades. From day to day he became worse, until at last he died, and a fearful gloom settled upon the camp. His grave was made on a knoll near the river Jordan, and no one ever had a more sincere band of mourners to lay him away. His last resting place was a bower of flowers placed by loving hands, and every

flower and particle of earth that formed his covering was wet with the tears of the mourners. A prayer was said and a hymn sung, and his sympathizing friends left him to the quiet of the desert, until he shall be awakened on the resurrection morn.

Near the crossing of the Jordan river, Peter Wimmer and John Spence, while hunting, discovered a couple of petrified Indians. They were in solid stone, as natural as life, and would have formed a most valuable addition to any collection of natural curiosities. The hair of each was as firmly fixed in the solid rock or petrified head, as ever was hair on a living person. But the policy of this band had been to preserve peaceful relations with the Indians who might be met, and to treat all with the sincerest kindness. The policy was effective. The band was undisturbed by Indians on the whole route. They seem to have been advised of the friendly character of the band with the vermilion-colored wagons, and the Indians gave them courteous treatment. Wimmer and Spence felt sure the Indians would look unkindly on any disturbance of their curiously preserved dead, and the everlasting mummies were left where they were found. The route of the band was on the south side of Salt Lake, and skirting the mountain so as to be sure of water. When the edge of the real desert was reached, which was readily recognized from the chart and descriptions received, preparations were made for crossing the desolate wastes. Provided with an ample supply of water, and thoroughly rested, the train started across, and was two days and nights almost uninterruptedly moving on before safety for the stock from thirst and starvation was reached. Then there was another rest. Soon after starting a mountain was

reached, which the members of the band called Backbone mountain, and skirting which brought them to the Thousand Springs valley, and from thence across to the little Humboldt, and down this to Mary's river, now the Humboldt. They passed down that to the Basin and Sinks, and across the desert to the Truckee river, which takes its rise in the Sierra Nevada mountains. Reaching the head waters of the Truckee, the windlass and ropes were again necessary to lift the wagons and oxen over the rocks. Here the party were treated to a general snow-storm, which gave them the impression that there was a mistake somewhere in styling this the land of perpetual summer.

Crossing the divide, the party was on the Yuba river, and soon after the divide was crossed to Bear river. Before starting down the mountain, it happened that Mrs. Wimmer was alone in camp, when she had an unexpected and decidedly unwelcome caller. A huge grizzly made the camp a visit of inspection, probably induced thereto by the scent of the cooking which was new and specially pleasant to his olfactories. Mrs. Wimmer was frightened, and undecided whether to seek safety in flight, or hide in one of the wagons. Finally she thought of bombarding a wagon-box with stones, and accompanying that with all the noise she could make. This mode of attack proved eminently successful, and the bear moved leisurely off to the mountains. None of the band, when told of the visit, could remember that he had lost a bear, and so spent no time in looking up this grizzly.

On the Bear river another of the band was laid to rest. The grief at the loss was not so great as when John Hargrave was stricken down, but the funeral

rites were performed in sorrow, not unmixed with thankfulness, because it is improbable that so large a company ever made the long journey across the plains with only two calls to perform the burial service. There was great cause for thankfulness that the band had so well escaped loss from accident or disease.

From this point the Harlan band went down to Steep hollow, and from thence across to Johnson's rancho, on the edge of the Sacramento valley. Here they were received with such an expressive welcome as made them almost forget their trials and the dangers through which they had passed. The owner of the rancho was formerly an English sailor, but several years previously had left the ship and married a squaw, and was now living most contentedly. Nothing he possessed was considered too good with which to welcome and regale the wearied emigrants, and here they stopped for ten days, recruiting the strength of themselves and cattle. Their objective point was Sutter's Fort, but having met with one who was glad to tell all he knew about that point, and the ease with which it could be reached, they fully realized that their long journey was practically ended, though many miles were yet to be traveled.

The grass was luxuriant and the air warm, and the emigrants and stock recuperated rapidly. About the 20th of October, 1846, the Harlan band left the hospitalities so generously tendered by Mr. Johnson, and started on the last lap of the long journey. Only one incident of any importance occured before they reached Sutter's Fort. A recruiting officer met the band and sought to enlist all the able-bodied men for service in the Mexican war, which was then raging furiously;

but the men had started for a given point, and declined to be side-tracked until the women and children were in safety. The band arrived at Fort Sutter about the 15th of November, 1846, and were heartily welcomed by the owner, Capt. John A. Sutter.

After a short time spent in looking over the condition of things, and getting Jennie and the children in comfortable quarters, Peter. L. Wimmer joined Captain Aram's company and started out in defense of the country. His service was brief, as he was shortly afterwards disabled by being thrown from a wagon, the team he was driving having become unmanageable and run away. Before he was fit for active duty, the war was practically ended, and he was employed about the Fort. In this way nearly a year passed, and then Captain Sutter determined to build a flour mill on Sutter creek, and Peter Wimmer, Peter Quivey, John Starks, and an old man named Gengery, were sent out in search of the timber required. After Wimmer and Starks had cut the first timber, and hewed out two mill shafts, the enterprise was abandoned, and a point was selected in Coloma valley, on the American river upon which to construct a saw-mill, and Mr. Wimmer and his family left the Fort August 25, 1847, and took up residence in the vicinity of the mill site, where Peter Wimmer was employed, and Elizabeth Jane Wimmer thus became the first white woman to set foot in a section of the country whose fame very soon after became as wide as the world. During the first nine months of her residence in Coloma valley, not another white woman ventured there.



Sutter's Mill and Marshall Monument.

CHAPTER X.

JAMES W. MARSHALL.

James W. Marshall was born in Hope township, Hunterdon county, New Jersey, May 10, 1812. Little is known of his early boyhood, but he was apprenticed to learn the wagon and coach-making trade when very young and became a careful and expert workman. When out of his apprenticeship he caught the "Western fever" and went to Indiana to "grow up with the country." Soon afterwards he went to Illinois, and in 1840 made another move, this time beyond the Missouri river, and bought a farm in the Platte purchase, near what is now Leavenworth, Kansas. Here he remained till 1843, and was obtaining financial success. He was specially subject to malarial influences, and was so severely afflicted with chills and fever during the fall of that year that his physician advised him that he must leave the country or die. His face was turned westward and he refused to go back toward the place of his nativity.

In May, 1844, his was one of about one hundred wagons that set out for the Pacific. The intention of these emigrants was to reach California, and there was no division of the train until Fort Hall was reached. There Marshall and about forty others determined to branch off and proceed to Oregon, and from thence go to California if their interests should so incline them. The Indians were then very troublesome, but so watchful was the company to which Marshall was attached that no attack was made upon it during the entire trip.

Marshall was dissatisfied with his prospects in Oregon and only remained there during the winter. The climate was too wet, and the probability of another attack of chills and fever decided him on making his way to California, which he did overland, arriving at Cache creek, about forty miles from New Helvetia, now Sacramento, in June, 1845. Very soon afterwards Marshall made the acquaintance of Captain Sutter, and about the same time bought two leagues of land on Butte creek, in what is now Butte county. This he stocked with cattle to the extent of his means and credit, and improved the place so that he could live there in comfort.

In the summer of 1846, a considerable portion of the Mexican population, led by ambitious men, began to anticipate a date at which the American residents would be in the ascendant if emigration were not stopped, and organized to prevent any more Americans from entering California. Force was threatened. Fremont was then at Sutter Buttes with an insignificant command, and Sutter, Marshall, and all the other Americans within reach, organized to join Fremont in defense of their countrymen. The "Bear Flag" episode was inaugurated. Marshall made a good and efficient soldier, until the surrender of General Andres Pico in March, 1847, closed the war, and he was mustered out. He returned to Fort Sutter to find his ranch devastated, and his stock all gone. No one would tell who was responsible for his losses, and he became wholly despondent.

Nothing better offering, Marshall accepted the position of overseeing some Indians employed by Captain Sutter in burning charcoal. His health was bad, and was not improved by the almost hopeless prospects

ahead of him. He was camping out near the burning pits, and for want of proper food and care, became almost helpless. In this condition he was found by Mrs. Wimmer, who prepared and carried to him food, and encouraged him with hope until he was placed in their cabin by Peter Wimmer, where he could receive proper attention. He was soon restored to comparative health, and with it a return to hope.

At this time Captain Sutter was the largest producer of grain in the Sacramento valley, and probably in California. Large numbers of emigrants reached the Coast every fall ; and the prospects were that the numbers would greatly increase in the future. All of them had to have flour, and would like to have lumber. Both articles were scarce and high in price.

Marshall recommended the building of a saw and grist-mill. An agreement was entered into with Captain Sutter, by which Marshall would perform the labor, and Sutter furnish the money required.

The articles of agreement were drawn by John Bidwell, prohibition candidate for President in 1892. Under this agreement Marshall hunted up a location, finally selecting the place where gold was found, because it was convenient to timber, and it was possible to transport lumber thence to Fort Sutter by wagon.

August 19, 1847, Peter L. Wimmer, Jennie Wimmer and ten Indians, set out for Coloma, and work commenced on the mill as soon as they arrived. Wimmer was engaged as overseer, and Mrs. Wimmer as housekeeper, and all were under the directions of Marshall.

The mill building progressed slowly, and during the month of December the dam and headgate had been completed, and water was turned on at night, so as to

wash out the sand and gravel which would be dug up by the men during the day. This was considered by Marshall a more certain way of getting rid of it than by shovelling, as by the latter method considerable would fall back from the bank into the race.

The date is very uncertain when the first gold was noticed. Marshall had frequently seen shining specks in the bottom, when noting the effects in the morning which had been produced by the flowing waters during the night previous.

On the morning of the 19th day of January, 1848, after the water had been turned off by shutting down the headgate, Marshall and Peter Wimmer were walking leisurely along the tail race of the mill, where the water had run all night, and washed away all the loose dirt dug up by the men the day before. Marshall observed a shining specimen lying on a flat rock close to the side of the race. Picking it up, turning it over in his hands, it required no great stretch of imagination to consider it a very remarkable representation of the "Bear" which had adorned the flag he had lately helped to raise as an emblem of California independence. The specimen at the time attracted his attention more because of its peculiar shape and queer likeness to a bear, than for its probable value. Handing it to Wimmer, he said, "What do you think of that?" Peter took it in his hand and felt its weight, and said, "That must be gold, I would take my pay in that metal." He became convinced that what his wife had so often said must be true; that the specks of bright metal that they had so often seen were gold.

Jennie had prepared to make a kettle of soap that day, and the two men had fixed her kettle of lye on

the fire before they left the cabin. Marshall says, "Well Peter, we will send that to Jennie, and let her boil it in her soap kettle all day, and see if it will tarnish it." Thus agreed they sent it to Jennie by Wimmer's boy. She threw it in the soap kettle after declaring positively "that it was gold," and there it remained for the day.

Her positiveness did not impress any of the men present with a belief that gold existed there. What could a woman know about such matters? Even her husband believed with the others that it was "fool's gold" or possibly copper. No inquiry was made about the specimen until next morning at breakfast. Then several jokes were sprung upon her. She was asked what kind of soap her gold made? Would it do away with the necessity of grease in soap making? If so, there was plenty more out there in the sand and gravel.

Then Jennie went for her kettle, and pouring the soap into a trough, made by hollowing out the stump of a tree, at the bottom of the kettle she found this beautiful nugget, polished bright by the action of the lye. Seizing it, she sprang into the cabin, threw it on the table before her husband and Marshall, shouting aloud, as she had from the first, "there is your nugget, and it is pure gold."

Peter Wimmer was now fully converted to his wife's belief that gold was there. The others admitted that it might be gold. Marshall was reticent in expression, but seemed deeply impressed with the possibility that it might, indeed, be gold. Other small nuggets were collected, and four or five days after, James W. Marshall took them all with him to Fort Sutter, where other matters called him.

Tests at the fort proved that it was really gold, and Capt. Sutter accompanied him to Coloma on his return. Upon their arrival at the cabin, the news of the test brought great joy to the little band and especially to Jennie, who felt that she was thus thoroughly vindicated in her convictions, and many hearty eulogies were passed upon her that evening. As she spread the table and loaded it with the best of everything in camp to eat, Marshall handed her the nugget she had thus tested in her kettle of soap, and says, "here Jennie; this will make you a nice ring, and it shall be yours." Jennie kept it with a woman's care, and always took great pride in showing the first nugget of gold found in California.

The number of whites engaged in the mill when gold was discovered was thirteen, including Mrs. Wimmer. None of those who were first in the field, were ever very wealthy, and not one had the ability to retain a sufficiency of what he did make, to render his old age comfortable. Only two are left, Henry W. Bigler and Azariah Smith, Mormons, and they are residing in Utah. Here is a fact for those who credit the superstition in regard to the number "13." The mill was completed and furnished the lumber for making the rockers to mine with, and cabins for the miners, as they arrived and located claims or engaged in trading.

James W. Marshall was not a success as a miner. In fact, he was not a success at anything. He tried to be independent, and was no doubt governed to an extent by pride, and a feeling that he had not been appreciated by the men who had become immensely rich through the means he had discovered. He had real grievances, due almost entirely to some quality want-

ing in himself. He was never prosperous. In 1877, the legislature of California voted him a pension of $1,200 per year to continue for four years. In 1887 $5,000 was appropriated for a monument, and this was erected on Marshall Hill, overlooking the point where the first nugget was discovered, and was unveiled May 3, 1890.

James W. Marshall died alone in his cabin at Kelsey's Diggings, Eldorado county, in 1885, with not enough wealth to defray the expenses of his simple burial. We have no desire to detract anything from the credit due him. He picked up the first nugget of gold in California. It is certain that this find would have amounted to nothing at the time, and possibly not for years, had it not been supplemented and rendered effective by Mrs. Wimmer.

We intend to make no apology for the niggardliness of the State and National governments, which gave no appropriate recognition of the actors who were the means of bringing the most unparalleled prosperity known since the world began, nor has there been another instance where the Nation has so utterly ignored persons through whom such great services to humanity have been rendered. The service and the neglect are alike phenomenal. Such honor as has been accorded to James W. Marshall came after it could not gratify him, and the California Gold Book is the first to give the true story of Jennie Wimmer's connection with the great discovery. Indeed, most of the pretended historians fail to spell her name correctly, and some would deny her any credit upon the strength of statements made by a couple of Mormons, who did not attempt to veil their feelings of animosity against this true American woman.

CHAPTER XI.

"THE WOMAN WHOM THOU GAVEST."

We have asserted that Mrs. Jennie Wimmer was the direct instrument in giving to the world the millions of gold recovered from the gravels and rocks of California, and for all that has been mined in the Australasian colonies as well. This we have proved as to California, and it now behooves us to make proof of the rest of our claim.

In 1788 a convict in New South Wales reported that he had picked up a nugget of gold, and the vast quantities found more than fifty years later renders his claim more than probably true. A guard was sent with him to verify his story and he failed to find any more. As an example and warning to other convicts who might be inclined to seek favor by such means, the unfortunate man was given one hundred and fifty lashes on the bare back. At other times, as convicts were opening roadways, pieces of gold were picked up. For some reason, wholly incomprehensible, no use was made of these constantly occurring finds, and no effort to learn whether gold existed in the country in paying quantities; but, on the contrary, as stated by Mr. Hargraves, every convict road maker who was so unfortunate as to "find a lump of the precious metal was instantly punished." The mystery of the existence of such vast quantities of gold in a country examined by geologists, and cultivated by civilized people, without any one suspecting its plentifulness, is no longer a mystery. Since the first nugget was picked up by the convict near Port Jackson in 1788, the excuse of "dis-

ciplining the convicts" made a severe whipping the certain and only reward for finding gold.

In 1827 Mr. E. H. Hargraves was in New South Wales, and resided there almost continuously for the next twenty-two years. He was not an educated geologist or mineralogist, but he was a close observer of nature. In his journeying through the unsettled portions of the colony he took particular note of the character of soil and rock, but without any view to the discovery of minerals.

In 1830 a piece of gold, several ounces in weight, was found near the Fish river, by a man in the employ of a Mr. Low. It does not appear that he was flogged for finding it, neither is there any record that any systematic effort was made to discover its origin.

In 1835, a shepherd named Macgregor found quartz containing mineral, and which he sold in Sydney, finding it to be gold. After that once in each year, on his visit to Sydney, he would take with him specimens of gold-bearing quartz which he had found in the Wellington district. He sold the small quantities he found to a man named Cohen, who transferred it to a jeweler to make up in goods ordered by his customers.

In 1839, Count Streleczki, an eminent geologist, made a careful geological examination of the identical territory which afterwards became the richest gold fields in Australia. He collected a large number of samples of rock and quartz, and these were submitted to Sir R. Murchison, who compared them with the gold-bearing rocks of the Ural mountains, and in 1844 the latter published his opinion that "gold must exist in Australia," and in 1846 before the Royal Geological Society of Cornwall, he urged the superabundant corn-

ish tin miners to emigrate to New South Wales, and there obtain gold from the alluvial soil.

In 1841, Rev. W. B. Clarke was making a geological survey for the colony. He picked up a piece of quartz containing gold, as he afterwards testified, and the weight of one specimen was about a penny-weight; it was what might be termed a fair sample. That bit of quartz was found at the head of the Winburndale valley and in the granite westward and of the Vale of Clwyd.

In 1846, a very considerable piece of gold was brought to the notice of the colonial government by a Mr. Smith, who demanded an "adequate reward" for his discovery. Investigation proved that a shepherd had found the lump of gold by accident, and afterwards sold it to a Mr. Troppet, who sold it to Mr. Smith, and none of the parties could indicate whence the gold came with any degree of definiteness.

This was the true state of knowledge about gold in Australia, when news of the discovery of gold in California reached the Australian colonies. At first it was not believed to have any foundation in truth. The news created no unusual excitement until a vessel from California arrived in Sydney having twelve hundred ounces of gold on board. Then every one went wild. The Mr. Hargraves we have named had been in hard luck most of the twenty-two years he had spent in the colony, and the great mass of the inhabitants complained of the same kind of experience. Conclusive evidence that there was gold in California, a place of which not one of them had any previous knowledge, except that it was somewhere across the sea, set all the adventurous spirits crazy with excitement. In July,

1849, the British barque Elizabeth Archer sailed with 168 passengers, eight of whom were cabin passengers, and one of the latter was E. H. Hargraves, the keen observer of rocks and soil. At the end of seventy-eight days the Archer cast anchor in San Francisco, and as soon as possible passengers and crew were off to the mines, every one of them deserting the barque the night of her arrival. In this chapter we have nothing to do with the vascillating fortunes of the miners. As soon as Hargraves and the eight others who had joined fortunes with him got a location, they tried recovering gold by washing the gravel in pans. This method was unsatisfactory, and they bought a second-hand rocker which had been introduced by the "Georgia miner," no other than our friend Jennie Wimmer. Even then, without special instruction as to its use, "eight of us worked hard the whole day, and returned to our tent at night, covered with mud from head to foot, with the scanty earnings of twelve shillings, or eighteen pence each." When posted as to how they worked the cradle in Georgia, they were rewarded with an average of six dollars a day to the man.

But the rocks and the soil had a more startling effect on Hargraves than present success or failure. "My attention," he says, "was naturally drawn to the form and geological structure of the surrounding country; and it soon struck me that I had some eighteen years before traveled through a country very similar to the one I was now in. In New South Wales, I said to myself, there are the same class of rocks, slates, quartz, granite and soil, and every thing else that appears necessary to constitute a gold field. Hargraves undertook to argue his companions into a belief that there

might be gold in Australia. He was laughed at, and told that many trained geologists had passed over those fields, and if gold was there some of these men whose business it was to read the rocks and reveal the secrets they contained must inevitably have discovered it. Thus Hargraves secured no sympathizers in his hopes; nevertheless, nothing disheartened, on March 5, 1850, he wrote to S. Peck, a merchant of Sydney:

"I am very forcibly impressed that I have been in a gold region in New South Wales, within 300 miles of Sydney; and unless you knew how to find it, *you might live for a century in its region and know nothing of its existence.*"

It will be noticed that he gives Mr. Peck no idea of the direction of the supposed gold region from Sydney nor its distance, only that it was within "300 miles." Till the following November Mr. Hargraves engaged in mining, and did as well as a reasonable man could hope to. "But the greater our success was," he writes, "the more anxious did I become to put my own persuasion of the existence of gold in New South Wales to the test. In a few days afterward I set sail for Port Jackson in the barque Emma, Captain Devlin, bent on making that discovery which had so long occupied my thoughts, and reached the place early in January, 1851."

Mr. Hargraves says: "The Georgia miner taught the people in the first instance how to obtain the gold by washing, but for which in all probability, notwithstanding what had been found of it, the story of its discovery might have passed away and become an idle tale, like that of the shepherd who found gold near Wellington, in New South Wales, thirteen years

before; for neither Captain Sutter nor Mr. Marshall knew how to obtain it, except by picking it up with their fingers."

Mr. Hargraves says that it was with an anxious heart that he landed in Sydney, in January, 1851. He felt positive that there were rich placer mines in New South Wales, and he had expressed this earnest belief to every friend and acquaintance since his first experience in the mines of California. From not a single one had he received any encouragement, and from most jeers and indirect insult.

February 5th he set out on horse-back for the point where he intended to make his first explorations. February 10th, he reached Guyong. There he received his first words of encouragement, and they were from a woman. Mrs. Lister was the keeper of the hotel. She was a lady of refinement, and was forced into such an occupation by reverses of fortune. As Mr. Hargraves required a guide, it became necessary to inform Mrs. Lister of the object of his visit. She entered into the scheme with enthusiasm, and sent her young son to show him the most direct route to the points he wished to reach. Fifteen miles from Guyong, February 12, 1851, Mr. Hargraves washed his first pan of dirt, found gold, and in his excitement, said to his young guide: "This is a remarkable day in the history of New South Wales. I shall be a baronet, you shall be knighted, and my old horse will be stuffed, put in a glass case, and sent to the British Museum." On returning to the Inn that night, Mrs. Lister rejoiced with Hargraves on his fortunate discovery.

From Guyong Mr. Hargraves proceeded to the Wellington district, where the sheepherder Macgregor,

had found the gold. There his friend, a Mr. Cruikshank, had settled. He was a man of prominence and intelligence. Without absolutely discrediting the reports of Hargraves, his friend tried to dissuade him from wasting his time in a hopeless enterprise. Not so Mrs. Cruikshank. She was sanguine that he would succeed. Almost at their very door a pan of dirt was taken, and on washing it, gold was discovered. Again his only encouragement came from a woman, and she declared her intention of continuing to explore the sands until she had procured gold enough to make all the rings required to satisfy her pardonable vanity.

Mr. Hargraves had an idea that the Crown ought to liberally reward the first practical discoverer of gold. To the end that he might obtain such reward, he returned to Sidney. The colonial secretary was a Mr. Deal Thomson. To him Hargraves reported at once, showing him a quantity of fine gold which he had washed from the sands on the Crown lands. Mr. Thomson doubted the truth of the story, remarking "That it was very strange the government geologist had not found it, if it existed in natural deposit." He said further: "If this is a gold country, Mr. Hargraves, it would stop the home government from sending us any more convicts, and prevent emigration to California; but it comes on us like a clap of thunder, and we are scarcely prepared to credit it."

The next day, April 3, 1851, Mr. Hargraves made the following proposition to the colonial secretary:

"I have the honor to submit, for the early consideration of the government, the following propositions: That if it should please the government to award to me, in the first instance, the sum of £500 as a compensa-

tion, I would point out the localities to any officer or officers they may appoint, and would undertake to realize to the government my representations, and would leave it to the generosity of the government, after the importance of my discoveries and disclosures have been ascertained, to make me an additional reward commensurate with the benefit likely to accrue to the government and the country."

April 15th the colonial secretary sent Mr. Hargraves the following answer:

"In reply to your letter of the 3rd inst., I am directed by the governor to inform you that his excellency cannot say more at present than that the remuneration for the discovery of gold on Crown land, referred to by you, must depend upon its nature and value when made known, and be left to the liberal consideration which the government will be disposed to give it."

Before leaving the mines to serve notice of discovery upon the colonial government, and try to make terms with it, Mr. Hargraves had shown how to construct and use the cradle introduced into California by Jennie Wimmer. When he got back to the mines some ten thousand pounds of gold had been taken out where he first discovered it by the few who had heard of the discovery, and the news of it was spreading on the wings of the wind. Later Mr. Hargraves was awarded ten thousand pounds sterling by the government, and many valuable presents of plate and jewelry by firms, clubs and individuals. He was also appointed commissioner of crown land, at a salary of twenty shillings per diem. In 1854 he published "Australia and its Gold Fields," which had a good sale. He was afterward knighted and pensioned for life.

Considering the vast amounts of treasure recovered from the rocks and valleys of the Australian colonies, and the fact that it was directly due to the discoveries made by E. H. Hargraves, his reward would seem insignificant, though much superior to anything tendered the discoverers of gold in California, to which all the gold discovered since 1848 is almost directly attributable. Yet Mr. Hargraves bears testimony to the encouragement he received from Mrs. Lister and Mrs. Cruikshank, and gives only the proper credit to the "Georgia miner," who was none other than Mrs. Jennie Wimmer. Thus, ridicule it as man may, to the "woman whom Thou gavest" is Christianity, civilization and commerce indebted for the wonderful impetus given them by the discovery of gold in California, and not less that which took place with the discovery of gold in the Australasian colonies.

CHAPTER XII.

GOLD.

"The *love* of money is the root of all evil." "Gold is the mother of all good." This apparent paradox takes nothing from the absolute truth of each statement. Love of money, and the wise expenditure of wealth, have nothing in common. Tracing the animal man back through the ages, his grandest achievements and his highest development are found in close proximity to a gold mine. Rarely has a nation been prominent in art and science, and the results of civilization, which has not had stores of the yellow metal to draw upon, and in those rare exceptions the people had

invaded the strongholds of other nations, and carried off the gold accumulated by them during centuries. The Temple at Jerusalem would never have been rebuilt, had not Solomon been able to draw upon the mines of Ophir. The golden sands from the blackness in "darkest Africa" have shed a blessed light over the people of the earth, and there can be no renewal of the sad scenes comprised in the centuries of "Dark Ages," unless again gold becomes almost unknown among men. In all the past, when civilization and progress seemed subsiding into the gloomy unknown, it is a fact that the known veins of precious metal had given out, and no new ones were being discovered. New gold fields would light afresh the fires of Christian zeal and philanthropy, and thereupon the sun would shine with new brilliancy in the firmament over human advancement. God will never close His ears and eyes utterly to the wants of men. When progress is threatened with complete stoppage, then the beneficent finger points out the means for its revival, and humanity moves on to the higher and happier plane.

Gold was not abundant in 1848. The world needed a new supply. The census returns of the living nations indicated a far more rapid increase in population than in the gold that would be needed to meet expanding requirements. The discovery came exactly at the right time, and the flow was so abundant that for a time gold was the cheapest known commodity in California, and later, in the gold producing localities of the Australasian colonies. In some places lumber was sold by the pound, and fifty cents per pound at that; flour at three dollars per pound, and other things in proportion. The times were financially unhealthy, and always are

when life's necessities cost anything approaching their weight in gold. Equally at outs are the times when only labor is cheap.

Gold was discovered at Coloma, January 19, 1848. So doubtful was Marshall of the value of his discovery that he made no effort to prove that it was gold he had found for several days after. It was forty miles to Sutter Fort, and a test could not be made nearer. As he had not been at the Fort for some time, he made a trip required by other matters, and in no degree influenced by the specimens of metal carried in his pocket. This fact is important as showing that only Jennie Wimmer had confidence in the value of the metal. There are other facts which appear peculiar at this distance from the discovery. Not later than the first week in February, Captain Sutter and Marshall were back at the mill, and the discovery of gold was made known to all the men. The "Georgia miner" had superintended the construction and operating of rockers. Gold was being secured in quantity. Considerable was soon after sent to San Francisco, and went as low as $4 per ounce in exchange for supplies. Early in May the editor of the California *Star* went to the mines, presumably to gather facts of interest to his readers. He announced in his paper on May 6th, that he had returned, and on May 20th noticed the departure of a fleet of launches, "laden with superlatively silly people" on their way to the mines. Prospects, four months after the discovery, were of small moment, or facts were being withheld from the public for some inconceivable reason by Marshall and Captain Sutter, but the news was spread abroad with astounding celerity, and it was accepted at its full value by men of a class having no

superiors. In every city in the north and south of America, companies were organized, and in many cases incorporated, for the development of mines in the far West. By the spring of 1849, more than thirty thousand brave and ambitious men had rendezvoused at Independence, Mo., Leavenworth, Kansas, St. Joseph, Mo., and Council Bluffs, Ia., ready to attack the mysteries of the plains as soon as vegetation began to send forth green shoots. Ninety-nine in every hundred of these would-be gold hunters had enjoyed the privileges of enlightened Christian homes. The great majority of them were not "crossing the Rubicon;" were not going away to stay, and had no call to "burn their bridges behind them," as do desperate men who have declared war against morals and society, and are traveling under a banner inscribed "The world owes me a living." In a word, there never was a more patriotic and order-loving set of men engaged in any enterprise since the world began than the Argonauts of 1849, who had temporarily severed home ties, and from whose numbers come the members of the California pioneer class, be they scattered where they may to-day. It is not to the acts of men gathered from cultivated homes in the United States, or elsewhere, that the necessity for vigilance committees or the services of Judge Lynch originated. At first California had to receive all that came from the ends of the earth, no matter how desperate or depraved. A year or so later it could divide these undesirable characters with Victoria and New South Wales, and rejoice in the relief from the presence of numbers of the desperately bad, as well as the golden prosperity of the Australasian colonies.

It is not our purpose to attempt a detail of the production of any camp in the State of California or on the Pacific coast. There is no day that we are not told substantially, "that the discoveries of 1848 were not specially important. If Marshall and his associates had not discovered gold, others would soon have done so." This is rather an unmanly way of shirking the responsibility which must ever attach to those who shared the blessings resulting from the discovery of gold, and yet ignored the claims of James W. Marshall and Jennie Wimmer until their cares and troubles were buried in the grave. The English government rewarded Hargraves generously immediately after his experience in California mines enabled him to point out the unsuspected wealth hidden in the sands of New South Wales, and the other Australasian colonies. Later, when his investments had proven his want of business judgment, and he was threatened with want, that government gave him a pension for his lifetime, and those who became prosperous through his discoveries were exceedingly generous in their treatment of him. That is in marked contrast with the treatment accorded by the government and the great army of private beneficiaries to Marshall and Jennie Wimmer. No care was taken to provide for the old age and necessities of either, and the small sums given them were tendered as charity, and not as benefits they had earned a thousand times over. It was in consequence of such neglect, and the actual want of Mrs. Wimmer, and her equally infirm husband, that the first nugget of gold discovered passed into the hands of W. W. Allen in 1877, and was used by him with the National and State governments, and prominent pioneers, in vain

efforts to obtain help for them. The genuineness of the nugget and the justness of the claims were acknowledged, but assistance was studiously withheld.

Surely these apologists for unparalleled neglect have never attempted to form an estimate of what the discovery of gold in California, and in Australia, which really hinged upon that, has accomplished for humanity. Ten years after the mines of California and Australia had begun to pour the golden current into the channels of trade the world over, the life of the American Nation was attempted by the most formidable and well organized force of brave and determined men who ever rebelled against a parent government. But for the prosperity and strength born of the addition of California and Australian gold to the wealth of the world, the United States would have been dismembered, and the ability of man for self-government would have become a matter of grave doubt among patriots. A little later war occurred between France and Germany, and the awful destruction of life and property, consequent upon active war, was cut short because one of the contesting parties could pay a war indemnity of one thousand millions of dollars in gold, a feat which would have been impossible for the combined nations of the globe prior to January 19, 1848.

In 1848 there were not more than two men in the United States reputedly worth as much as $1,000,000 each. To-day there are more than one hundred men and women in the single city of San Francisco who are individually worth more than that, and from seven to ten thousand in the United States; and it is not a rarity for single benevolent individuals to give from a quarter of a million up to found a college or

university, or spend that much in some other direction for the improvement of mankind. In the same ratio has been the advances in science, manufactures, cultivation of soil, production of lands, culture of minds, prosperity of communities, conveniences of travel, intercourse of peoples, and ease and comfort in which men and women live. These advantages are not all confined to the limits of the United States, though far more evenly distributed among her citizens than elsewhere.

The early miners of California depended entirely upon placer mining, or gold found in the sand and gravel along streams and gulches, or where the surface had been washed down from the mountains and deposited on the flats for ages. For the first few years after the discovery there was no quartz mining. Even in 1850 it was estimated that only $40,000 was invested in quartz mining machinery in the whole State. The following is a list of the nuggets found, so far as known, which produced gold up into the thousands in value:

California has yielded many large and beautiful "nuggets" of gold, but for the size of her chunks of gold, Australia leads the world, at least in modern times, and there is no record of the big finds of the miners of ancient times in the nugget line. Though California has not produced very many nuggets of the great size of a few of the largest found in Australia, she has yielded an immense number of very large "chunks" of gold and of pieces of curious and beautiful shapes, treasured by miners as "specimens", and of larger sizes than the pieces called "chispas." Indeed, California ranks as a coarse gold region, coarse gold

being found in almost every camp in the state, whereas in many countries, even in most all other places in the United States, nearly all the gold found is in the shape of fine dust or very small grains.

The first big lumps of gold found in California created great excitement among the miners. They at once began picturing in imagination masses of gold larger than could be lifted by a dozen men. It was a common camp-fire amusement. There were afloat stories of men sitting down to starve by huge golden boulders rather than risk leaving their finds to go in search of transportation facilities.

The first nugget of sufficient size to create more than a mere local sensation was found by a young man who was a soldier in Stevenson's regiment. It is related that he found it in the Mokelumne river while in the act of taking a drink from the stream. The nugget weighed nearly twenty-five pounds. The finder at once hastened to San Francisco with his prize, where he placed it in the hands of Colonel Mason for safe keeping. The big lump was sent to New York, and placed on exhibition. It created a furor and was probably the cause of many a man striking out for California.

The largest mass of gold ever found in California was that dug out at Carson Hill, Calaveras county, in 1854. It weighed 195 pounds. Other lumps weighing several pounds were found at the same place.

August 18, 1860, W. A. Farish and Harry Warner took from the Monumental quartz mine, Sierra county, a mass of gold and quartz weighing 133 pounds. It was sold to R. B. Woodward, of San Francisco, for $21,635.52. It was exhibited at Woodward's gardens for some time, then was melted down. It yielded gold to the value of $17,654.94.

August 4, 1855, Ira A. Willard found on the West branch of Feather river a nugget weighing fifty-four pounds avoirdupois before, and 49½ pounds after melting.

A nugget dug at Kelsey, El Dorado county, was sold for $4,700. In 1864 a nugget was found in the Middle fork of the American river two miles from Michigan Bluff, that weighed eighteen pounds, ten ounces, and was sold for $4,204 by the finder.

In 1850 at Corona, Tuolumne county, was found a gold quartz nugget which weighed 151 pounds 6 ounces. Half a mile east of Columbia, Tuolumne county, near the Knapp ranch, a Mr. Strain found a nugget which weighed 50 pounds avoirdupois. It yielded $8,500 when melted. In 1849 was found in Sullivan's creek, Tuolumne county, a gold brick that weighed twenty-eight pounds avoirdupois.

In 1871 a nugget was found in Kanaka creek, Sierra county, that weighed ninety-eight pounds. At Rattlesnake creek, the same year, a nugget weighing 106 pounds 2 ounces, was found. A quartz boulder found in French gulch, Sierra county, in 1851, yielded $8,000 in gold.

In 1867 a boulder of gold quartz was found at Pilot Hill, El Dorado county, that yielded $8,000 when worked up. It was found in what was known as the "Boulder" claim, from which many smaller gold quartz nuggets have been taken at various times.

Some years ago a Frenchman found a nugget of almost pure gold, worth over $5,000, in Spring gulch, Tuolumne county. The next day the man became insane. He was sent to the Stockton asylum, and the nugget was forwarded to the French consul, in San

Francisco, who sent its value to the finder's family in France.

In 1854, a mass of gold was found at Columbia, Tuolumne, weighing thirty pounds, and yielded $6,625. A Mr. Virgin found at Gold Hill in the same county a boulder that weighed thirty-one pounds eight ounces, and when melted yielded $6,500. A gold quartz boulder found at Minnesota, Sierra county, weighed twenty-two pounds and two ounces and yielded $5,000.

In 1850 a nugget was found at French gulch, in the same county, that weighed twenty-one pounds and eleven ounces, and contained gold to the value of $4,893. In 1876, J. D. Colgrove, of Dutch Flat, Placer county, found a white quartz boulder in the Polar Star Hydraulic claim from which he obtained gold to the value of $5,760.

At the Monumental quartz mine, Sierra county, in 1869, was found a mass of gold that weighed 95 pounds, 6 ounces. It was found in decomposed quartz at a depth of 25 feet below the surface. This was the only "pay" found in that particular part of the mine. All the auriferous energy of the vein at that point seemed to have been concentrated in the one nugget.

In 1855 a nugget weighing sixty pounds was found at Alleghanytown, Sierra county. It was a mass of gold taken from a quartz vein. Several other large "chunks" were taken from the same mine—lumps of nearly pure gold, weighing from one to ten or twelve pounds. Those masses of gold were dug by Frank Cook (afterward city marshal of Marysville) and others, his partners.

In 1851, a Mr. Chapman and others flumed a set of claims on the middle Yuba. When the water was

turned from the river into the flume, about the first thing seen in the exposed end of the channel was a horseshoe-shaped mass of pure gold, which weighed twenty-eight pounds. This was a very handsome "showy" nugget. It was sold to Major Jack Stratman, of San Francisco.

The Sailor diggings on the North fork of the Yuba, just below the south of Sailor ravine, about three miles from Downieville, were wonderfully rich in nuggets. The diggings were owned and worked by a party of English sailors in 1851. In their claim the sailors found a nugget of pure gold that weighed thirty-one pounds. They also found a great number of nuggets weighing from five to fifteen pounds. The party all left together for England. They took with them all the nuggets they found, both great and small. They were carried in two canvas sacks, the weight being too great to be conveniently handled in one sack. When the party reached England, they, for a considerable time, made a business of exhibiting their collection of nuggets, and various fancy specimens, in all the large towns and cities, thus infecting great numbers of people with the gold-digging fever, for just at that time came the world startling news of the great gold discoveries made in February of that year in Australia.

In French ravine, Sierra county, 1855, there was found in the claim of a Missourian named Smith a double nugget of about pure gold. The larger of the two nuggets weighed fifty pounds, and connected with it by a sort of neck was a lump of gold weighing fifteen pounds. In taking out the nugget the two were broken apart. The large nugget yielded $10,000 and the small one $3,000.

In September, 1850, B. F. Wardell, now in Virginia City, found in Mad canyon, on the Middle fork of the American river, a nugget of solid gold weighing six pounds. The nugget had in it a round hole and the finder made use of it in his cabin as a candlestick. It was doubtless the most valuable candlestick on the Pacific coast. After the nugget had been thus used so long that it was covered with candle grease, the owner sold it, grease and all.

In the early days of placer mining in California colored miners were proverbially lucky. Companies of white men were always ready to take in a colored man as a partner, believing that he would bring them good luck. Steve Gillis, of Virginia, Nev., a veteran printer and pioneer of the Pacific coast, gives the following sample of "nigger luck:" "In 1863 a colored miner, who was out on a prospecting trip, found on the slope of the Table mountain, Tuolumne county a nugget that weighed thirty-five pounds avoirdupois, and yielded over $7,000. The nugget was found on the slope where Table mountain drifts down towards Sha's Flat. The man saw a corner of it sticking out of the ground, and digging it up he planted it in a new place near by, marking the spot, and continued on his way to his intended prospecting ground. He did not take up a claim where he found the nugget, as he believed it to have rolled down from some point high up on Table mountain. He found such good pay in the place he went to prospect that he remained there at work for several weeks, feeling quite at ease in regard to the big nugget he had cached. Finally he quit work in his digging, and set out to look for his big nugget. On coming in sight of the spot where he

had buried it, he almost dropped in his tracks, for he saw a big company of men at work just where he had made his "plant." The men proved to be a lot of Italians, and they had worked up to within about ten feet of the spot where lay buried the big nugget. Fortunately the "colored brother" had with him on that trip his "rabbit foot," for the "rescue" was about as fortunate as the "find."

In a drift mine at Remington hill, Nevada county, in 1856, the half of a smoothly washed boulder of gold quartz was found which yielded $4,672.50. The nugget was smooth on all rounded sides, but had on one side a flat, rough surface. At the time the chunk was found it was remarked that the other half of the boulder might possibly be somewhere in the same claim. In 1858 the owners of the mine had a hired man who was engaged in drifting out pay dirt. One day this man unexpectedly announced that he was going to leave; that he was going down to Nevada City to try his luck for a time. The man was paid his wages, and, shouldering his blankets, took his departure. After he had been gone a short time, one of the partners said: "It is strange that the fellow should all at once quit work here, when he had a steady job at as good wages as he can find anywhere in the country. I wonder if he has not found the other half of that boulder?" The party addressed scouted the idea.

"You may laugh," said the suspicious partner, "but I feel in my bones that the fellow is packing the missing half of that boulder away in his own roll of blankets."

"Well, what are you going to do about it?"

"I am going to mount a horse and follow the fellow.

I am going to make him shell out that chunk of gold."

"So? Very well; you shall have my half of all you get."

Mounting his horse, the man who had "suspicions" took the road to Nevada City with a sixshooter in his belt. When he overtook his man and asked him to throw down and open out his roll of blankets, the fellow was at first quite indignant and inclined to be ugly, but when he saw a revolver leveled at his head, he cried out: "Cave; now, how in —— did you find out that I'd got hold of the other half of that nugget?"

"Guessed it," said the mine-owner. "Shell her out."

Down went the blankets and out came a big golden nugget. Sure enough, it was the other half of the boulder. Taking the chunk the owner told the man to "git;" that as he had met with a great temptation he was forgiven. The half thus received panned out $4,430.75, making a total for the whole boulder of $9,103.25. The suspicious partner was very sick when he saw the missing half of the boulder brought home. However, the other, after paying himself $1,000 for his trouble and his ability as a detective, divided the remainder with the man who had laughed at him in the start. He said he took only $20 for his trouble and risk; but for his "sabe" he must have $980.

Near Sonora, Tuolumne county, in 1852, a nugget weighing forty-five pounds, and containing gold to the value of about $8,000, was found. The finder had a friend who was far gone with consumption, yet was trying to work in the mines. The owner of the nugget

saw that by working in the water, and lifting heavy boulders this man was fast killing himself. He told his friend to take the big nugget and go back to the States, and exhibit it, as at that time such a mass of native gold was a curiosity, to see which many would willingly pay a reasonable sum. As the ailing man was well educated, it was arranged that besides the nugget, he should take some fine dust "chispas," gold-bearing quartz, black sand, gravel and dirt from a placer, and the like, and with all was to fix up a lecture on life in the mines, mining operations, and California in general. When the owner of the nugget wanted it, or its value, he was to let the other know of his need.

The sick man took the nugget to the States, got up his lecture, and did well wherever he went. For a time the miner heard from his friend pretty regularly; then for months lost track of him. He began to think his nugget lost; that perhaps his friend had been murdered and robbed in some out-of-the-way place. One day, however, a letter reached the miner from a banker in New Orleans telling him that his friend had died in that city, but had left the big nugget at the bank subject to his order. The miner wrote to have the nugget melted down, and in due time he received a check for a little over $8,000.

Pocket mining, as practiced by the experts of California, is a branch of gold-hunting that may be said to stand by itself as an "art." The pocket miner follows up the trail of gold thrown off from a quartz vein, and strewn down a mountain slope, until he at last reaches the mother deposit, whence the gold scattered below proceeded. This is an operation which sometimes requires many days to be devoted to the careful wash-

ing of samples of dirt taken from the slope of the mountain. Many rich pockets have, however, been found by accident. One of the richest of the pocket mines in California had $10,000 thrown out at one blast. The gold so held the quartz together that it had to be cut apart with cold chisels. It is estimated that this mine yielded $2,800,000 in the years 1850 and 1851, and new pockets have since been discovered almost yearly, somewhere in the peculiar formation at and about Carson Hill.

The telluride veins of Sierra county, extending from Minnesota to the South Yuba, have been prolific of pockets. A big pocket found in the Fellows mine on this belt yielded $250,000. Many other pockets yielding from $5,000 to $50,000 have been found in this region. Many rich pockets have been found about Grass valley, Nevada county; Auburn, Placer county, and Sonora, Tuolumne county. The "Reece pocket," Grass valley, contained $40,000. This sum was pounded out in a hand mortar in less than a month. Near Grass Valley, a pocket that yielded $60,000 was found by a sick pilgrim who was in search of health and knew nothing about mining. The "Green Emigrant" pocket vein, near Auburn, was found by an emigrant who had never seen a mine. It yielded $160,000. This find was made within thirty yards of a road that had been traveled daily for twenty years. No more "pay" was found after the first pocket was worked.

The "Devol" pocket in Sonora, alongside the main street of the town, owned by three men, yielded $200,000 in 1879. It was nearly all taken out in three weeks. The "grit specimen," showing arburescent

crystallization, sent to the Paris Exposition, was found in Spanish Dry Diggings, Eldorado county, weighed over twenty pounds, and contained over $4,000 in gold. About $8,000 additional of the same kind of gold crystals was taken from the same pocket. The formation at this place is slate, and a fine grained sandstone filled with crystals of iron pyrites in cubes.

At an American camp between the forks of the Stanislaus, in 1880, Le Roy Reid found a pocket in the "grass roots," from which he took out $8,200. Near Magalia, Butte county, in 1879, a pocket paid its finder $400 for two hours work.

The above examples of the richness of the pockets often found in quartz veins must suffice. They were taken pretty much at random. A full history of the big "pocket finds" in California would make a large volume.

Since the discovery of gold at Sutter's Mill, California has yielded over $1,300,000,000 in that metal. How much exactly will never be known. The Chinese must have carried away an immense amount. In 1880 the Government tried to make them report. From eighteen counties of the State there were partial reports. The amounts they acknowledged obtaining were upwards of $1,751,244 for that year alone. Those who know the Chinese miners know what kind of a report they would be likely to make. If they acknowledged securing $1,751,244 as late as in 1880, what must have been obtained in all the years before, when all the places were new and prolific?

Outside of California, few nuggets of note have been found in any of the Pacific Coast States and Territories. The largest nugget ever found in Nevada was

one taken out of the Osceola placer mine about twenty years ago. It weighed twenty-four pounds, and is supposed to have contained nearly $4,000 in gold. A hired man found and stole it, but repenting gave up to the owners in a month or two over $2,000 in small bars—all he had left of the big chunk. In the same mine about a year ago a nugget worth $2,190 was found.

Montana's largest nugget was one found by Mr. Rising, at Snow State gulch, on the little Blackfoot river. It was worth $3,356. It laid twelve feet below the surface, and about a foot above the bed-rock.

Colorado's biggest nugget was found at Breckenridge. It weighed thirteen pounds, but was mixed with lead carbonate and quartz.

The pioneer nuggets in the United States were found in the placers of the Appalachian range of mountains, where gold was discovered as early as 1828. In October, 1828, a negro found grains of fine gold in Bear Creek, Ga., but the discovery did not attract much attention. Presently the same negro found a nugget in the Nacoochee river worth several thousand dollars. This "find" started a gold hunting furor. Several other nuggets of considerable size have been found in Georgia at various times.

The biggest nugget ever found in the Appalachian mining region was that at the Reed Mine in North Carolina. It weighed eighty pounds.

In the same State some children, playing along a creek, found a nugget that weighed twelve pounds. The quartz veins of this region generally show a good deal of coarse gold, good-sized lumps, but seldom weighing as much as a pound.

The foregoing grouping of information as to nuggets found in California and elsewhere was made by Dan De Quille, an old and experienced journalist on the Pacific coast, for the San Francisco *Chronicle*, and is correct.

Nearly all the counties in California contain mineral deposits of some kind, and the yield of gold is large. Various causes have operated to reduce the quantity, and especially that produced from placer and hydraulic mining. The beds of the ancient rivers have not been fully explored, but large capital is required to uncover their hidden deposits. Even some places in the beds of the modern rivers, which used to yield enormously, are still very rich, but the courses of the waters will have to be changed into new channels, at great expense, before the gravels can be examined.

The mining industry presents many encouraging features, notwithstanding the smallness of the output compared with the early days of its history. The difficulties between the hydraulic miners and the ranchers must be soon settled. There should be no antagonism between them. Their interests are closely interwoven. They cannot prosper without mutual encouragement. Invention will inaugurate methods for getting the buried riches from mountain and gulch without entailing injury upon the valleys. Then the output of gold will increase beyond anything known in the early days of mining, for the experience gained in all these years will be scientifically applied.

CHAPTER XIII.

WONDERFUL PROGRESS OF FORTY-TWO YEARS.

DEL NORTE is the northwestern most county in the State. Its early mining history is stained with blood. Three young men were prospecting on Klamath river in 1857. They were killed by the Indians, and their bodies horribly mutilated. The miners in the vicinity discovered an Indian village, and it is said killed every one it contained, without regard to sex or age, as a punishment for the triple murder.

Happy Camp was the name given to the first resting place of the prospectors. They were sure that the Klamath river was rich in gold, but the best results were obtained from the beach sands in the early days. Some gold is still obtained from the black sands on the shores of the Pacific ocean. Rich quartz ledges have been discovered within a short time, and it is believed the product will be large. There are large deposits of chrome, copper and iron, but it costs too much for transportation to render the working of them profitable.

SISKIYOU COUNTY adjoins Del Norte on the east. The first miners to enter that country in 1850-51 came into favor by claiming to be "Maki" men. A Scotch trapper, named Thomas McKay, had gained their good will by just treatment in the trips he had made gathering furs for the Hudson Bay Company and they were friendly to any whites who looked like "Maki" as they pronounced his name. Donald McKay, who led the Warm Springs Indians in the Modoc war, was his son.

The first strike of gold was on Yreka creek, in 1851, and the news of its richness spread throughout the State, and caused 2,000 miners to collect there in a very short time. Rich quartz ledges were discovered in the eastern part of the county, and many of the prospectors spread out into what is now Modoc and Lassen counties—indeed produced the formation and organization of Modoc county.

The entrance of the Southern Pacific railroad was worth more to the county than its mines, though these had secured it its first settlers. For the past few years the increase in population and wealth has been very rapid.

MODOC COUNTY, meaning "hostile stranger," is the northeastern most county in the State. It never was prominent in a mining sense, but possesses enough natural wonders to attract the curious. The Modoc war of 1873 was confined to this county. The Modocs were always treacherous, and while Captain Jack lived, were destructive to the interests of white settlers. Every peaceful method was pursued to make them contented until General Canby was assassinated while having a talk with them. Then their punishment was determined upon, but as they knew all the intricacies of the mysterious lava beds, it was a long and tedious matter. Finally, Captain Jack, Chief Sconchin, Black Jack and Boston Charley were convicted of murder, and hanged. That produced peace, and since then the county has greatly improved, but feels the want of railroad facilities. Under the lava beds are caves filled with ice which never melts. The surface is wonderful, but the interior more so.

HUMBOLDT COUNTY was formed May 12, 1853. In 1856 the county seat was fixed at Eureka by the Legislature. The county contains about 2,300,000 acres of land, and the valleys and foothills are dotted with prosperous homes. Congress has appropriated $1,750,000 to complete the improvements on Humboldt bar and bay, which will make the city of Eureka the shipping point for all of northern California.

The territory comprised in this county was visited by the trapping party under Jedediah Smith, in 1827, but the coast had been visited as early as 1543. On the 26th of February, of that year, Juan R. Cabrillo discovered and named Cape of Perils, and in 1604 the Fragata, a small vessel belonging to Vizcaino's fleet, found shelter near Cape Mendocino. But the fine bay of Humboldt was not discovered until 1849, when a party under Dr. Josiah Gregg, traveling overland during the winter months, found and named it.

As early as 1854 ship building was commenced at Eureka. Allen & Co. in that year built the steamer Glide to ply between Eureka and Arcata. A great number of vessels have been constructed there since. There are two shipyards at Eureka, and they are both prosperous, employing about 300 men at the present time.

The dairying interests of the county are in fine condition, and are being greatly extended, with the establishment of creameries and the introduction of the latest machinery. Until lately the production of butter and cheese was confined to the Eel river valley, but it is now distributed to the various parts of the county.

Mining, which, in the Trinity excitement, first settled the territory, is taking on new importance. A number of gold placer claims in the Willow creek district were bonded during 1892 by a syndicate which proposes to introduce water, and practically work them. Fifty-two quartz ledge locations have been recorded in the same section, and this activity has necessarily created considerable excitement. Be-

sides the gold industry, petroleum is known to exist in the county. In the Mattole section two companies are actively developing, and one has a well down 2,500 feet, and the prospects for an important strike are most promising.

While all other interests are specially prosperous, it is the lumber of Humboldt county which has produced its great wealth, the assessments for 1882 aggregating $18,012,051, an increase of more than $1,000,000 over the previous year. When the section was first entered by white men the forests of redwood were unbroken, and trees ranging from 200 to 400 feet high, and measuring from twenty to seventy feet in circumference, covered all the hills. Trees yielding from 50,000 to 100,000 feet of lumber were common. The demand for this fine lumber has caused much of the timber to be felled. In 1892, 165,000,000 feet were exported, and nine cargoes, amounting to 5,325,888 feet, valued at $128,306, were sent to England. Very much of this large sum was paid for labor, and nearly all of it is expended in the county, adding just that much to its permanent wealth.

The evidences of prosperity are universal. They generally take the shape of improvements of homes, and the building of finer places of business. This is more apparent in the prosperous city of Eureka, because there the expenditures by the Government are taking place, but they are observed in all the thriving towns in the county. Many thousands of dollars have been put into permanent improvements in Arcata, Ferndale, Table Bluff, and every section of Humboldt. Everywhere are signs indicating the ability of the citizens to live more comfortably and spend more freely. Eureka has adopted city airs, as shown in concrete sidewalks, electric lights, steam heating plants, and great business blocks which would be noticeable in any city in the State. Taking it all in all, Humboldt county offers fine opportunities to the enterprising, whether in business, mining, dairying or general farming.

TRINITY COUNTY is in one of the northern tiers of counties. The San Francisco *Chronicle* supplies a brief history of Trinity county, which is known to be reliable, and is specially interesting. It was first explored in the early part of this century by the bands of trappers sent out from Vancouver by the Hudson Bay Company. That the coast had been fairly well known at least two centuries before is evident from the records we have of the voyages of the early navigators. With the extension of settlements above the bay of San Francisco came the project for a commercial metropolis on the upper coast, probably at Trinidad, as that was the only harbor on the charts then in existence. In March, 1848, a meeting was held in San Francisco to make arrangements for the exploration of that bay. The all-absorbing gold excitement intervened for a time, but when Reading penetrated to the head waters of Trinity river and found gold in its sands, this induced several other prospectors to cross the mountains into this heretofore unprospected region. They were so successful that in a short time it was suggested that an entry port be established through which passengers and supplies could reach this region by a nearer and easier sea route.

Reading discovered and named Trinity river, thinking at the time that it emptied into Trinidad bay. The next year an effort was made to find the mouth of the river. The expedition was formed in two divisions. One was to sail up the coast, and the other was to leave the Trinity headquarters and march westward. The coasting party returned without any news, but the land division which started on November 5, 1849, from

Rich Bar, crossed the South fork at its junction with the main Trinity, and by Indian advice struck westward over the ridge, reaching the coast after much trouble at Little river, whence, on December 7th, they gained Trinidad Head, called by them Cheggs' Point, in honor of their leader. Turning southward they named Mad river in commemoration of Cheggs' temper, and coming upon Humboldt bay on December 20, 1849, they called it Trinity. This was not the first discovery of the bay, however, for a Russian chart of 1848, based on information by the Russian-American Company, points it out as entered by a United States fur trading vessel in 1796. The party camped on the site of Arcata, and celebrated Christmas on elk meat, after which Elk river was named. They then separated. Cheggs, with three others, after vainly trying to follow the coast, finally drifted into the Sacramento valley, where he died from exposure and starvation. The other party following Elk river, and then turning southeast, reached Sonoma February 17, 1850; Woods, their leader, having been mutilated by bears while en route. When the few survivors reached civilization once more they told of their discoveries, and immediately ships were fitted out and large parties sailed for the northern bay. Many of them arrived in safety, and these immediately proceeded inland, where they met several of the miners from Trinity, who were searching for the Cheggs party. It was by members of this expedition that the city of Klamath was founded.

Shortly after the town of Trinidad was started, and it was soon the most prominent place in these regions. It grew so rapidly that in 1850 it was made the county

seat of Trinity county; which was created in that year and embraced all this newly explored region west of the coast range. It received further impulse from the Gold Bluff excitement during the winter of 1850–51, which drew a crowd of adventurers in search of ready washed gold from the ocean bluffs. Meanwhile diggers had pushed their way along the Trinity, and northward to the Klamath river. The region around Humboldt bay shared largely in the traffic with the Trinity mines, and revealed such promising agricultural and timber resources that in 1853 Humboldt county was formed out of the western half of Trinity, which was subsequently shorn to its present dimensions by the erection of other counties.

The three classes of mining—placer, hydraulic and quartz—are carried on extensively in Trinity county. Since 1880 the placer mines have generally passed into the hands of men of means, and improved machinery has been added, and the output has been largely increased. The Klamath river, into which the Trinity empties, is a torrential stream, and hydraulic mining is carried on extensively. There are several fine properties about Trinity Center, and at Junction City there are several mines which have been large producers for years. The Haas, being one of the smallest, produced $35,000 in 1892. The Trinity Gold Mining Company owns 400 acres, every panful of which shows gold. It has produced some $28,000 in the same time. There are over three hundred hydraulic mines in the county.

Three years ago quartz mines were discovered on Canyon creek, and several of them are producing well, those west of them are doing development work. The quartz mines at Deadwood have been the

heaviest producers of any mines in the State. Those belonging to the Brown Bear Company produce from $35,000 to $75,000 monthly. A large amount of development work is being done in various parts of the county. A Colorado company has had 120 men employed digging a ditch to convey water twelve miles to the old Hubbard placer claims, which have been good producers.

At Cinnabar, in the northeastern part of the county, a large force has been employed, erecting furnaces, building houses, and preparing for energetic work in the summer of 1893, and it is expected that a large amount of quicksilver will be sent to market.

The mining interests being prosperous all other enterprises in the county are buoyant, and the prospects of Trinity county are gilt edged.

SHASTA COUNTY was formed in 1850, and the first Legislature which met at San Jose allotted nearly all of northern California to that county. The county seat was at Redding's ranch on the Sacramento river, near the mouth of Clear creek. It did not remain long there, however. The town of Shasta sprang into prominence because of the extensive and rich diggings found in that vicinity, and it rapidly became one of the most important towns in the northern part of the State. The county seat was at once removed thither, and was maintained there until quite recently, when the shifting of population and trade centers caused by railroad construction compelled the return of the local seat of government to Redding. The town of Shasta was almost totally destroyed by fire

in December, 1852, and again severely suffered from the same cause in June, 1853, and at various times subsequently.

The territory known at present as the county of Shasta was first visited by the trappers from British Columbia in the early part of the century. These men remained in the neighborhood but a short while, however, as they were looking for game and an easy route to the central and southern part of the State.

It was in 1843 that Major P. B. Reading, General Bidwell, of Chico, and a number of others, penetrated into the upper portions of the Sacramento valley, and decided to make their homes there. They were charmed with the beautiful scenery, the fertility of the soil and the abundance of water. They obtained large grants of land in the valley, Major Reading selecting an immense tract on the bank of the river. Subsequent experience has amply demonstrated the wisdom of the choice made by him.

A short time after the organization of the State Government the increase of the population of this region, caused by the stories brought down from the mines, became so great that a portion of Shasta was cut off and organized into an independent county, called Siskiyou. Within the territory allotted to the new county was Mount Shasta; so that peak is not, as very many people suppose, located in the county of the same name. About the same time Tehama county was formed from a portion of Shasta and in due time the rush to the mines and the constant settling and forming of mining camps in places heretofore deserted was so great that the counties of Lassen and Modoc were also created. Among the other flourishing towns of

Shasta county may be mentioned Anderson, Cottonwood, and Millville. In the northwestern part of the county there are several valleys which support settlements of considerable size, and which, though somewhat isolated, are prominent factors in the development of Shasta. Fall River Mills, Burgettville, Pitville, Hot Creek and Burney Valley are the most important settlements of this region.

As already remarked, Shasta county is one of the oldest mining counties in the State, and millions of dollars have been washed from her gulches and hills, but it must not be supposed that because the days of placer mining have departed the search for gold has been abandoned. On the contrary, it is the opinion of many that only a small beginning has yet been made in the development of the mineral resources of this region, and many weighty facts are cited in support of this belief

Shasta is noted for her superb vineyards and fine orchards, and the acreage devoted to these is greatly increased. And the mines, also, show great activity. More miners find employment than ever before, and more capital is invested. The Sierra Butte Mining Company paid $150,000 for its property on Square Creek, and it has been a dividend paying mine from the start. The Gladstone Company divides about $15,000 monthly among its stockholders. There are a great many small properties which are paying well, and every interest in the county is prosperous.

LASSEN COUNTY had an interesting history, pending its organization. It is very probable that bands of trappers were in Honey Lake valley,

Lassen county, very early, but the fact is not proved. It is not doubted that Peter Lassen and Paul Richeson were there in 1848, when engaged in finding a route from Fort Hall to the upper Sacramento valley by which the Sink of the Humboldt could be avoided. The route they took, and which they called "Lassen's road," was followed by emigrants on their way to the mines for a few years, but was finally abandoned, owing to its great length and numerous dangers. In 1857 a very short and excellent route was discovered by a party led by a man named Noble. They discovered a heretofore unknown mountain pass, which they named "Noble's pass," and so it has been known ever since. Had Lassen discovered this route the county might have been settled earlier, as the emigrants would have taken it instead of following the Truckee and Carson trails. In the latter part of 1853 Isaac N. Roop, postmaster at Shasta, came over with a few friends and staked off a tract of land one mile square at the head of Honey Lake valley. In the summer of 1854 Roop erected a frame building on his claim which he used as a storeroom for supplies which he sold to emigrants who passed through the valley that year in great numbers.

In 1855 Peter Lassen and a companion named kenebeck again entered the county on a prospecting tour, and were so gratified at the results that Lassen at once crossed the mountains to procure men to work the place systematically. In October, 1855, Lassen returned with several men, food and mining supplies, and a large band of cows, oxen and horses. A log cabin was immediately erected. It was sixty feet long and sixteen feet wide. They then dug a ditch about two

miles long from the little stream now known as Lassen's creek to the camp.

All the while numerous settlers had been staking and working claims, and in April, 1856, an attempt was made at forming some kind of government. On the evening of the 26th of that month a mass meeting was held and Peter Lassen was elected president. It was moved and adopted that as Honey Lake valley was not within the limits of California the same was declared a new territory. It was further stipulated that each male settler over twenty-one years of age should have a right to take up a claim of 640 acres The dimensions of the county as planned by these men, and to which the name of Nataqua was given, covered about 50,000 square miles. The settlement grew so rapidly that in 1857 the authorities of Plumas county began to take judicial notes of it, and, believing it to be within their jurisdiction, asserted this belief by creating it into a separate township under the name of Honey Lake township. The settlers were indignant and held several mass meetings, but finally, after attempts at self-government, they decided to obey the authorities of Plumas county. When the government surveys were made it was proved beyond a doubt that Honey Lake valley was within the boundary line of California and in Plumas county.

In 1864, after a full consideration of the subject, it was decided to organize a new county out of the extreme northeastern portion of Plumas county and eastern part of Shasta counties. To this was given the name of Lassen in honor of old Peter Lassen, who was undoubtedly the first white settler.

TEHAMA COUNTY was regularly organized in 1856, and Red Bluff was selected as the county seat in 1857, and there it has remained since. No reason has been given for the selection of that name. The first settlers in what is now Tehama county were N. C. Chard, A. G. Toomes and R. H. Thomes, who went there in 1844, settling near Alder creek, and appropriating five leagues apiece of the best land they could find. Houses of adobe were constructed, and large numbers of Indians employed, a beef paying the wages of 100 Indians for a week. Peter Lassen also took up his residence in the territory in 1844. In the three following years a great number of pioneer settlers were attracted to the section, and Tehama City and Danville became thriving rivals, and Red Bluff was started in 1849 by John Meyers, who built the first house there.

Tehama county is centrally located at the head of the Sacramento valley in northern California, and almost surrounded by high mountains. The precious metals in paying quantities have never been found within its borders, but the dry atmosphere and fertile soil specially adapt it to the production of the finest grapes and the choicest fruits, and many thousands of acres have been planted to these. In 1892 large quantities of fruit, green and dried, were sold in Portland, St. Louis, Chicago and New York, realizing fine prices. The prune and grape yield was extra good. A cannery was established at a cost of $25,000, and 10,000 cases of fruit were packed and sold, the profits more than paying for the plant.

The school system of Tehama county is splendid. It was inaugurated in 1853, the first teacher being a young

lady. The high standard established by her has been sustained. The community is a quiet one, devoted to farming and fruit growing, and it has escaped the exciting scenes which enlivened mining camps. Tehama is a fine locality for those seeking quiet and prosperous homes.

PLUMAS COUNTY derived its name from its principal river, Rio de los Plumas, or Feather river, which was so called in 1820 by Captain Luis A. Arguello, who headed a Spanish exploring expedition, because of the abundance of wild fowl feathers found floating on the bosom of the stream.

As early as 1843, Peter Lassen and a Russian comrade named Isidore Meyerwitz, were there in search of a better route from the northern part of California to the Sacramento valley. It was decided to branch off from the old Oregon trail, and pass to the south down the stream to Lassen's peak, and thence by the base of a lofty mountain to Mountain Meadows, and west to Big Meadows and the headwaters of Huer creek, and down that stream to Lassen's ranch, where the emigrant parties generally disbanded. This road retained its popularity for only a year or two, when it was abandoned for a better route.

Of all the emigrants heading for the gold fields, the objective point was Sacramento, and none considered the journey ended until the Sacramento valley was reached. None thought of making a stop to prospect for gold, and very many were inclined to feel weary when they found it necessary to retrace the toilsome way they had passed a month previously.

Very few halted in Plumas county, and yet one of the emigrants was the cause of opening up the country in 1850. Among a party of these travelers in 1849 was a man named Stoddard who, with a companion, left their companies in the mountains to hunt game, it being their intention to join the others a few miles further on. They roamed among the mountains for a few hours and finally lost their way. Over hill and down dale they walked, but could find no trace of their friends. At last they came upon a small lake, from which they drank to refresh themselves. While standing on the shore they noticed several glittering particles along the water's edge. They picked several of them up and on examining them closely found them to be lumps of pure gold. Before they had time to collect a stock they were set upon by the Indians. Stoddard's companion was killed, but he managed to escape and made his way to the mines, where he told his story, which was given little credit until he showed the nuggets of gold he had found. A search party was formed and in the following spring they left the mines and went in search of the lake, which became known as Gold lake, and the effort to find it, the Gold lake movement. After wandering aimlessly about for a few weeks they became despondent and began to look with suspicion on Stoddard, who they began to think was crazy and the lake a myth. Certain it is that neither the lake nor any traces of it was found, and after a month the party returned home after endeavoring to kill Stoddard, who, suspecting their intention, made his escape.

The news of Stoddard's reputed find and the subsequent effort to again discover the lake attracted

thousands from all parts of the State to the scene, and in a short time what was previously a wilderness became quite a settlement.

Before the Gold lake excitement occurred, the first Legislature of California had divided the State into counties, attaching to Butte county this entire region, which was then an unknown wilderness. The geography of the State was so imperfectly known and the population so fluctuating, that proper assignment was impossible. During the year 1852 a number of settlements were made on the fine agricultural land of the valleys. The fall before, the Court of Sessions of Butte county had divided this locality into townships and had appointed officers. But these were of small use as the miners preferred to settle their little quarrels among themselves and, though part of Butte, the Plumas section was little governed by it.

So large was the population in 1853 that the county conventions of both political parties were held in this region. Finally the people were tired of being ruled by officers elected by another section of the county, and in 1854 John B. McGee, a member of the Assembly and resident of the Plumas section, introduced a bill creating the county of Plumas. It passed the Assembly without any trouble and on the 17th of March the Senate took favorable action upon it. On the 18th of the month the signature of Governor John Bigler made it a law and Quincy was made the county seat, a position it has maintained until the present time. This place is equally dependent upon its mining interests and upon agriculture, being situated in the American valley. The location of the town is pleasant and desirable, and the climate is healthful. Quincy has a weekly news-

paper, several general business stores, good schools, secret societies, and all other social machinery of a well-ordered California business community.

La Porte is a mining town situated at an altitude of 4,500 feet upon the divide between the Feather and Yuba rivers. It is about thirty miles south of Quincy. Snow falls in winter, some time attaining a great depth, traveling being carried on by means of snowshoes.

Taylorville is the principal town in Indian Valley, one of the most prosperous agricultural regions in the county. Greenville is credited with a population of several hundred. Meadow Valley has a fine situation on a stream which is tributary to the North Feather river. The headwaters of two branches of the Feather, spreading out toward the northeast and northwest, have cut their way through gorges and canyons from 300 to 500 feet below the general level of the country. From the base of the Sierra a series of valleys stretch across the county for 100 miles in a southeastern direction, connected with each other by canyons, passes or low divides, such as Big Meadows, comprising some 30,000 acres; Mountain Meadow of small area; Butte Valley, three miles long and one mile wide; Greenville, a small valley; Indiana Valley, eight miles long and four miles wide; Genessee Valley; Clover Valley, a long gorgelike depression, narrow at its lower end, but reaching a width of a mile or more at the upper end, and the lower end of Sierra Valley, a depression of some twenty miles long and ten miles broad.

There are many rich mines in Plumas county, and active development work is being prosecuted. The want of the communities is a railroad, and the people are anxious therefor. Several surveys have been made,

and the hope is well founded that the county may have quick communication with the outside world at an early day.

MENDOCINO COUNTY was organized in 1859, and got its title from a neighboring cape, so christened in the sixteenth century by a Spanish navigator in honor of Antonio de Mendoza, the Viceroy of Mexico and patron of the voyager. In May, 1863, the settlement of the county received an impetus by the dicovery of gold in several localities both in placer mines and quartz ledges, but it was not abundant, assaying low, and was not worked to any great extent. Coal, copper, silver and petroleum were discovered about the same time, and were worked advantageously. Rich specimens of copper were found at Sanel and Point Areva.

Mendocino county has prospered unusually, owing chiefly to great natural advantages, and of late years to the completion of the San Francisco and North Pacific railroad. Her soil is exceedingly fertile, and the redwood forests compete with the wealth-giving agricultural enterprises. Along the coast are several prosperous towns supported by the lumbering interest.

LAKE COUNTY is one of the smallest in the State. It was noted for its rich grazing grounds as early as 1840. In 1847 the first permanent settlers, Messrs. Stove and Kelsey, located near Clear Lake, and the next year were killed by the Indians. Fear of the Indians delayed settlement until 1853, when this abode

of lovely scenery and healthy climate filled up rapidly. In 1861, Lake county was cut off from Napa, and a seat of government established at Lakeport, on the land of William Forbes. Uncle Sam, at the foot of Clear Lake, a mountain peak 4,000 feet high, is the most elevated point in the county. The county contains medicinal springs of high character which attract many visitors, and has some promising quicksilver deposits. The Sulphur Bank Company produces an average of 200 flasks monthly. Otherwise, the county depends upon agriculture and fruits, but these are sufficient to render its citizens independent and happy.

GLENN COUNTY is the latest subdivision in the State. It is probably the banner wheat growing section of the world, and claims that there is more first-class agricultural and less waste land in proportion to area in it than in any other county in the State. It also contains many profitable orchards and vineyards. The warm valley land composing the larger portion of the county is suitable for the production of citrus fruits, grapes, cherries, peaches, apricots, prunes and plums, while the foothills and mountains yield bountifully the choicest olives, pears and apples.

During 1892, a chrome mine was developed in the mountains, in the western part of the county, and yielded several car loads each month. No other mines have been opened. Willows is the county seat and contains every convenience of a young and prosperous city.

BUTTE COUNTY was born with a "gold spoon in her mouth." Her rivers, valleys and moun-

tains have yielded millions of the yellow metal, and are continuing to add vast sums to the wealth of the world. Her great fields wave with wheat and grain, and the luscious orange flourishes abundantly in her warm soil. Butte as a county had its origin under the act of February 18, 1850, a few months after the first convention met that established American government in the State. It included the present territory, Plumas, a part of Tehama, Colusa, Sutter and most of Lassen counties. It was about eighty miles by 160 miles in extent, being as large as Vermont and Delaware together, and containing 8,330,000 acres.

The mining industries of Butte have been some of the most extensive in the world. John Bidwell discovered gold in the Feather river in March, 1848, two months after Marshall picked up the nugget at Coloma. The operations, which began with the simplest form of pan-washing of the early miner, have culminated in gigantic hydraulic systems to wash whole mountains into sluice boxes, which have startled the entire world. Many large nuggets have been found in the various mines of Butte. In 1853 an old forty-niner found a chunk of gold as big as a beef's heart. He sold it for $1,500. In 1859 a nugget weighing fifty-four pounds was taken from a hydraulic mine near Dogtown. It was called the "Dogtown nugget," and its value was $10,690. A number of pure diamonds were found in the early sixties at a place known as Cherokee flat. The two leading mining districts are Bangor and Forbestown. In the former cement gravel mines, abandoned for twenty-five years because the owners did not understand the method of extracting the gold in a profitable manner, were reopened in 1892, and two

hundred men were employed, while fully $30,000 was expended in opening the mines, building mills, arrastras and other mining works. Large sums have been expended on the Gold Bank mine, owned by W. W. Stow, and on the Shapespeare mine, owned by Alvinza Hayward. These are to introduce the improved methods which, when they become general, will make the yield of precious metals in California as great as it ever was. In the high regions about Gravel Range, and what is known as the Golden Summit district, extensive and costly improvements were made, and some $80,000 has been expended in mills and in opening and developing quartz or gravel mines. These mines promise to be very rich. Near Oroville during the past summer, the Golden Feather mine turned out a large sum in gold, but the amount cannot be learned. The Banner quartz mine near Morris ravines is being extensively developed by Major McLaughlin and a New York company.

Oroville is the county seat of Butte. The county is well supplied with transportation facilities. The first stage, running from Marysville to Shasta, began operations in 1851. Now railroads or stages penetrate to every portion of the county.

YUBA COUNTY ranks among the first whose territory gave the world the exciting stories of gold discoveries and all of the interesting incidents attendant thereon. Traversed as it is by the famous Yuba and Feather rivers, both of which were supplied with an endless succession of "bars" rich in the precious yellow metal, Yuba has poured millions into the capacious lap of her country.

Marysville, which quickly sprang from a riverside rancho to a flourishing busy city, has contributed in the past some of the most thrilling incidents of California pioneer life. About the time that various settlers were acquiring Mexican land grants all over the valley of the Sacramento. Theodore Cordua obtained of Captain Sutter in 1842 a lease for nineteen years of the tract of land where Marysville now stands. Cordua erected a substantial adobe house, which was called "New Mecklenburg," but the name was soon supplanted by just plain Cordua's Ranch. The house stood near the trail from the upper to the lower portions of the Sacramento valley, thereby becoming a way station for considerable travel. Cordua established a trading post at his place, and did considerable trafficking in various commodities. By 1847 he had thousands of cattle and hundreds of horses at his rancho. There were numerous Indians in the valley at that time. These Indians were about like the balance who overran California, being known under the generic term of "diggers." Their habits of dress and eating were on a par with their kind all over the State. Many other settlers joined Cordua before the gold discoveries. In October of 1846 a large number of emigrants arrived, who spread all over the region now covered by Yuba and Sutter counties. During the spring of 1847 the survivors of the Donner party arrived at Yuba, and some remained in that territory.

Yuba and Sutter counties have much early history that is common to both. Neither amounted to much until gold was discovered in the rivers. Jonas Spect and a party under Michael Nye discovered gold on the Yuba about the same time, which was in May, or

June, 1848. The year 1849 did very little to alter the conditions or prospects of Yuba and Marysville. An instance in that year worthy of note was the residence of a man named John S. Moore, who successfully counterfeited quantities of Missouri bank bills. He industriously exchanged this paper for the miners' dust. They were very glad to be accommodated, as the difference in weight was very appreciable. The difference in value was also very appreciable, as they discovered when on their way home, rich with the spurious bills, they attempted to cash them. Moore escaped to South America and was never brought back.

In 1850 the growth of Marysville, formerly known as Nye's ranch, was very rapid. By that time the mines all about and on the Yuba river were paying tremendously. In January, 1850, there were about 300 people in Marysville and stores and residences sprang up like magic. A number of steamers from Sacramento soon began to arrive, bringing provisions and supplies, which had to be stacked upon the plaza. The old Cordua place, then known as Nye's ranch, was divided into town lots, the sale of which began immediately. Stephen J. Field, then a young attorney from New York, arrived about this time and began to do lots of work in making documents for land transactions. January 18th, when Field had been three days in town, an election was held almost "on the spur of the moment," and Field was elected first alcalde. He had an opponent who had been in town a week, and his priority almost defeated the attorney. There was 231 votes cast. That same night festivities were indulged in, with congratulations of the successful

candidates, and the town after such discussions was christened Marysville, in honor of the only woman there, Mrs. Mary Covilland, whose husband had owned nearly the whole townsite, purchased from Cordua.

The county of Yuba was one of the originals created by the first legislature, on February 8, 1850. The derivation of the name is disputed, some crediting the origin to the Indians, others to a Spanish word, "Uva." At the time when Yuba was finally partitioned off the town of Marysville could hardly hold its population. There were about 500 regular residents and at least 1,000 transients. Dry goods boxes for shelter were sold for $2 and $3 each.

From the time of the discovery of gold in the Feather and Yuba rivers, the mining industry increased steadily for years. Then exhaustion of gold deposits became apparent. It has seen the rise and fall of great hydraulic enterprises, and hopes to see the powerful monitors again washing mountains into sand and gravel, and compelling them to deliver up the stored gold. Nevertheless it is highly prosperous as it is. Orchards and vineyards are furnishing train loads of green fruit for the Eastern markets, and the drying houses and canneries are preparing other train loads. It is questionable whether the fertile valleys will not create more and safer prosperity than did gold in its palmy days.

The Southern Pacific Company bought the Northern California railroad, running between Marysville and Oroville, and immediately extended it on through Sutter county by what is known as the Knight's Landing road. It is built in the thorough manner usual to that company, and lessens the traveling distance between

Marysville and San Francisco by about thirty miles. Yuba county, as originally formed when California was cut into but twenty-seven subdivisions, extended from the Sacramento river to the eastern boundary of the State, including its present limits and Sierra, Nevada and a portion of Placer counties.

SIERRA COUNTY was formed from a portion of Yuba, with Downieville as county seat. The first explorers of this region are not all known. Along the canyon of the North Yuba men were mining as early as the summer of 1849. Phil. A. Haven went up the North Yuba early in September, 1849, and found notices of seven different claims posted on Big Rich bar. He located on Little Rich bar, and was joined by Francis Anderson, who on the 14th of September, 1849, found the first gold discovered in the neighborhood of Sierra's capital town, Downieville. The news soon spread and by November there were several settlements made, and in the immediate neighborhood of the North Yuba there were many populous camps. The discovery in this region of gold by Mr. Anderson was quite accidental. He went up to the forks and just above where the Jersey bridge at Downieville now stands made his find. It was not a rich strike, about $4, but it encouraged him and he went a little further up the stream, where he struck an exceedingly rich gravel deposit. He was almost afraid to go on with his work alone, as the traces of Indians were everywhere about, and he knew not whether they were hostiles or otherwise. He worked for an hour or so, standing in the water, taking out

from $10 to $20 to a pan, when he heard loud noises on the hillside, and looking around saw a band of men dressed in various bright colors descending toward him. They were whooping and yelling as they clambered down the steep descent, and Anderson's first impression was that they were Indians thirsting for his gore. Grasping his knife, he decided to sell his life dearly, but was soon pleased to find there was no cause for fear, as they proved to be the Jim Kane party. They paid no attention to Anderson, but rushing into the water proceeded with their work of washing gravel with their pans. They were very fortunate in their selection of their place of work, for they cleaned up that day $300 to the pan. Anderson hastened back to Mr. Haven in the evening, and told him of the fabulous sums which he might carry off with the aid of a rocker. A small party with a rocker started out next day, and although they fell short of their expectations they did exceedingly well. On the morning of the fifteenth, Jim Kane's party netted $2,800. From the bar formed by the forks of the Yuba at this point, there were taken several million dollars, and from that day to this, Sierra county has been noted for its rich mines.

During the year 1892 the mining developments of this section have been numerous and varied, many of which are bright with promise of golden dividends. San Francisco, New York and English capitalists have invested thousands of dollars in some of the most valuable properties, and are energetically working to place them on a paying basis. Judging by the past years of gold yield of millions of dollars extracted from Sierra's lava-capped mountains, handsomer interest on his prin-

cipal than is obtainable elsewhere will reward the venturesome prospector. The home people, believing that none should be assisted who do not help themselves, risk all their available funds in prospecting for new mines to replace those which may soon be worked out, and frequently with most gratifying results.

The Young American, William Tell, Sierra Buttes, Chips, Cleveland, Butte Saddle, Biglow, Independence, Phoenix and other quartz mines have been operated with varying success, and there have been cleanups of many thousands of dollars during the year 1892 in and around Sierra City. The Gold Bluff ledge, near Downieville, recently purchased by New York capitalists, bids fair to become a profitable enterprise. The Oxford, Oro and other as promising locations, will undoubtedly be developed when capital affords the "open sesame" to their secreted treasures.

A few miles from Forest City are the Ruby and Bald mountain Extension drift mines, where quite a number of miners are employed The stockholders of these claims have had dividends of thousands of dollars during the past year, with a showing for many more. Ancient river beds, hundreds of feet below the surface of the mountains, have been reached by long tunnels, that of the Extension being already over a mile and a quarter underground, with a probable auriferous channel of miles northeast up the pliocene lead. At Alleghany the Maple Grove Company, composed of Forest City, Downieville and San Francisco business men, have with a hard bedrock tunnel of about 350 feet recently tapped what is thought to be in the lower part or outlet of the Ruby channel, and the encouraging prospect obtained from a small dump full of gravel has justified the put-

ting on of several men to thoroughly develop the lead, and a large part of which comes down through the Extension and South Fork locations. Many rich ledges are being successfully worked near this mining camp. In northern Sierra the Gibsonville and La Porte ridge channel is being profitably developed through the Thistle shaft, to which a mile or more of tunnel may in time be run from Wallis creek for an economical working of the mine. Other drift mines have yielded well, especially the Happy Hollow and Pioneer.

Sierra county is exceedingly mountainous, and only Sierra valley, situated in the eastern portion of the county, is adapted to extensive farming. It is thirty miles long, and from ten to fifteen miles wide. Artesian wells have been sunk at small expense, and many of the farms are irrigated with the water thus supplied. The greater portion of the population being engaged in mining, the ranchers obtain good prices for everything they produce, and dispose of it all at Sierra City and Downieville.

COLUSA COUNTY was created in 1850; but before a single house had been erected in Colusa City it had been named and located. It was built on the ruins of the Indian Capital, called Coru, inhabited by Colus Indians, of whom Sioc was the head chief.

The first real settler in Colusa county was a man named Bryant. He raised corn on his place in 1846. When gold was discovered two years later, there were not a dozen whites in the county. The gold excitement populated the rivers, creeks and hills at a lively pace

in 1849 and 1850. Towns or camps began to be staked out, and civilized houses were erected. By 1852 a hotel was built at Colusa. The Sacramento river afforded easy transportation from Sacramento city, and freight and commodities came that way.

The history of the earliest white settlement of Colusa is almost identical with that of Butte. The reason is that much of the common territory belonged to the former. John Bidwell was one of the pioneers in that section, passing through in 1843. Peter Lassen acquired one of the very first land grants, although his land was not entirely within Colusa. His settlement was made in 1844. Up to this year the Colusa Indians had never seen a white man. These Colusa Indians had a tradition that a flood once ingulfed California. Only an eagle and a mud turtle remained alive, the former flying above the water and the latter floating upon a bunch of tules. They worked together. The eagle tied a string to the turtle, which dove down and brought up mud, placing it upon the floating tules, the eagle helping to pull him up with the load. In this way they built the Butte mountains, which protruded above the water. On this land some elders grew, from which these industrious creatures made a male and female Indian, who in turn populated California.

The minerals of Colusa are of the same character as those of Butte. Quantities of gold were discovered there when the early prospectors had spread out over the whole of the valley of the upper Sacramento. Silver abounds in many places and copper almost in the native form exists in large deposits. Quicksilver is quite plentiful near the line that divides Colusa from Lake county.

The sandstone quarry near Sites is attracting general attention. It is on the Colusa & Lake railroad, about ten miles from its junction with the Northern railway. The stone is on the surface and is easily quarried, only requiring to be blasted from the hillsides. In color it is a gray blue. The specific gravity is greater than granite. Considerable quantities have been removed, the Oakland Theater having been built of it, and a large amount having been used in the construction of Trinity Church in San Francisco during the year 1892. The supply is simply inexhaustible, inasmuch as it consists of mountains of solid sandstone 400 feet high, and eight miles long. It is the best quarry in the State and easy of access.

A company was incorporated last year to make salt at their works north of Sites. It is said to be superior to Liverpool salt, and the scheme is one which points to a grand success.

SUTTER COUNTY was named in honor of Captain John A. Sutter, who at one time claimed to own the territory which composes it, and a considerable portion of Sacramento and Placer and the valley portion of Yuba, and a little of Colusa as well. The Mexican authorities never acknowledged his title to a grant of any such dimensions. Indeed, this was about five times greater than any one was permitted to claim. By getting friends to locate on the more desirable parts, he and they held possession of a good deal more than he was ever entitled to. Captain Sutter constructed a building so strong in appearance that it was always spoken of as "Sutter's Fort." He began to

raise wheat on a large scale, using Mexicans, Indians and emigrants as husbandmen, and no doubt had the first flour mill in operation which was known in California. Compared with some of the great flour manufactories now operated in California, it could only be called a "flour-mill" by curtesy; but it was far more effective than the Mexican and Indian way of grinding the wheat between two loose stones worked by hand.

California pioneers ever held a warm place in their hearts for Captain Sutter. To them an earnest welcome was given, which could not fail to be appreciated by men and women who had passed through such trying scenes as no description can render real in any sense. Those who shared his hospitality after the long journey across the plains, and who are still in the land of the living, have only good words for, and pleasant memories of Captain Sutter, and all Americans regret the pecuniary misfortunes which overtook him towards the close of his life.

Situated as it was, with mining fields on every side, Sutter county had a lively interest in the success of mines, but contained no very rich deposits of gold within its borders. Its citizens were devoted to raising bread and meat for those who delved for gold. From wheat growing and cattle raising the change to the more profitable business of fruit growing was easy, and more especially as Sutter county was noted for its small thoroughly cultivated ranches. In the last few years its ranches have been among the heaviest shippers of green, dried and canned fruits of any section in the State, and the fruits have obtained high favor in the East. Peaches take the lead of all fruits grown in the county. After peaches come apricots, pears,

plums and small fruits. Citrus fruits do finely, and the cultivation of these is multiplying rapidly every year.

The most flourishing towns in the county are in the order named: Yuba City, Live Oak, Meridan, Nicolaus, Pleasant Grove and Sutter City, the latter place being the most youthful. The first named is the county seat, and has doubled in population since 1880, gaining the most of this in the past five years.

NEVADA COUNTY is on the eastern boundary of the State. The name means "snowy." The central part of the county contains rich gold workings, including quartz, hydraulic and placer mines. The western part is especially adapted to horticulture and agriculture, and contains about 250,000 acres.

The first settlement in the county was made by John Rose at Rose Bar, near Smartsville, in 1849. A trading post was established in the same year on Bear river, near the mouth of Greenhorn creek, and Rough and Ready was settled by the Rough and Ready company about the same time. Topographically the county is very uneven throughout, the great snowy mountains covering the eastern part and the foothills the western part. These hills and mountains have yielded millions of dollars to the pick and pan of the miner.

A short distance above Nevada City is the famous hydrauling mining region, which formerly added millions annually to the gold product of the county. The stopping of hydraulic mining by the courts was the

greatest calamity that ever befell the county, reducing its taxable property over $3,000,000, and lessening its inhabitants at least 5,000 souls. Grass valley is the largest town in the county, and has a population of about 7,000. The principal industry is quartz mining. Here are located the pioneer quartz mines and mills of the State.

The county has connection with the outside world by means of the Nevada County Narrow-Gauge railroad, finished in 1876, extending from Nevada city through Grass valley to Colfax, where it connects with the Central Pacific. Truckee, in the eastern part of the county, is noted for its product of lumber, wood and ice. The celebrated "Bartlett pear belt" extends through a portion of the county, and considerable attention has been paid to the raising of this fruit. Nevada county offers to the public a fine climate, excellent agricultural and horticultural land, and the best field for mining investments in the world.

This county is still the banner gold mining section of the Golden State. Within the year just passed there have been no startling discoveries nor remarkably rich "strikes," and, in fact, no extreme activity; but the old mines have continued to yield their full measure of gold, and during the year 1892 there have been many new mines opened up, some of which are already yielding in paying quantities, and most of which are promising.

Nevada county is always sure to retain prestige as the peerless mining producer of California. In 1892 a great enterprise was inaugurated that is calculated on its successful completion to almost revolutionize quartz mining in Nevada county. A powerful company has

been organized for the purpose of placing at a central location a large electric plant which will furnish power for all the mines within the county. Behind this company are prominent capitalists of San Francisco and San Jose. Work on the plant has already been commenced, and at a point on the South Yuba river an immense dam has been built for the development of water-power for running the dynamos. With the opening of spring the work will be resumed, and the plant is expected to be in operation during the year 1893.

A similar enterprise which will follow this is the building of an electric railroad to connect Grass valley and Nevada City with many of the most important mines. Applications have already been made to the supervisors of the county for rights of way extending from the east to the west county lines. The great advantage of these two enterprises to the county can hardly be estimated. The lack of adequate power and transportation facilities for the mines has heretofore been one of the greatest drawbacks to the proper development of the county and its wonderful mineral resources.

One of the surest indications of coming prosperity in Nevada county during the year has been the interest taken and the progress made in horticultural and agricultural developments. Those who have heretofore devoted all their capital and energy to the development of the mines have come to realize that there are other possibilities for this region. The shipments of green fruits, mostly pears and peaches, from Nevada county during 1892, far exceeded those of any previous year in its history. More land was cleared and pre-

pared for tree planting and grain raising than in any previous five years.

PLACER COUNTY formed a part of Sutter, April 25, 1851, the original dividing act was amended, and the additional counties of Placer and Nevada created. Three or four attempts have been made since to create new counties by slicing off some of Placer and parts of adjoining counties. They have failed, and Placer remains as originally formed, with Auburn as county seat.

Gold was discovered at the "Dry Diggings," in Auburn ravine, Placer county, by Claude Chaua, May 16, 1848, just four months minus three days after its discovery by Marshall at Coloma. Chaua, who was intimate with Marshall, made this discovery while leading a party to Coloma to engage in gold digging there. The party were wholly inexperienced, and did not succeed well, and soon after abandoned the field, and proceeded to the Yuba river, where after a year's work they cleared up $25,000. When Chaua and his party left the ravine it was not long allowed to remain neglected. In the "Dry Diggings," near Auburn, during the month of August, 1848, one man got $16,000 out of five car loads of dirt. In the same diggings a good many were collecting from $800 to $1,500 a day. The region soon acquired the name of "The North Fork Dry Diggings," and in the fall of 1849, when the settlement became more concentrated and stores were established, was given the name it now bears—Auburn.

In the summer of 1848 the principal tributaries of the American river were explored by a company of Oregonians, and rich prospects obtained upon almost every bar, as far up the Middle Fork as they proceeded. At this time the bars were generally explored as high up the Middle Fork as Rector's Bar, which proving as rich as any diggings the explorers expected to find, and it being difficult to go further up the river with horses, they ceased to travel and worked the mines until winter set in, when they returned to the settlements in the valley or to their homes in Oregon.

Early in 1849, the system of washing the auriferous dirt with the common rocker was introduced upon the middle fork of the American river, and was regarded as a great improvement to gold mining. During this year miners flocked to the bars in great numbers from "the Old Dry Diggings" and Coloma and elsewhere, and during the summer settlements were formed in many parts of Placer county, including Auburn and Ophir in the foot-hills and many less important camps on the American river.

In the pioneer days Placer was noted for its agricultural attainments. Fruits, grain and vegetables were raised in great abundance, while of late years the horticultural industry has taken precedence of all others, and the fine fruits of the Placer foot-hill orchards and vineyards are known all over the West.

The principal industries of Placer are the production of gold, fruit and the raising of wheat, cattle, sheep and wool. Over 130,000 acres are annually devoted to wheat, barley and hay. Gold beneath ground and gold above ground are the characteristics of Placer. It is a strange though oft contradicted

fact, that there in the thermal belt, situated 500 miles north of the famed orange groves of San Bernardino and Los Angeles, and within fifty miles of the snow on the summit of the Sierra, the oranges ripen nearly four weeks in advance of those in Southern California. Every variety of climate characteristic of the temperate zone may be found in Placer. At the summit in eastern Placer are found many feet of snow, while in the thermal belt on the sunny side of the Sierra may be found green fields, singing birds, a wealth of roses and golden citrus fruits.

Placer, in 1891, shipped over 19,000,000 pounds of delicious fruits. In 1892, over 24,000,000 pounds. The total shipments of New Castle this season were 14,070,265 pounds as against 11,952,291 to the correponding date of last season, or a gain of 2,084,794 pounds. Penryn comes in this year as a close second, while large shipments were made from Colfax, Auburn and Loomis. During the month of September, 1892, a total of nineteen cars were shipped from various points in Placer in a single day.

Renewed activity is being manifested in the mining circles of Placer county. New capital is taking hold of many good mines that have lain idle, and their development is likely to be prosecuted on a more systematic and business-like plan than in the past. Several of the best mines in the county are shut down on account of legislation. The Ophir district, four miles south of Auburn, is the most noted locality for quartz, and contains eighty or ninety claims. But few of them, however, are being worked at present. Notably among them is the Nina, Rica, Morning Star, The Moore and the Golden Stag. Several good properties

in other portions of the county are being worked with profit, viz: The Dores and Pioneer at Damascus, American Bar at Michican Bluff, Drummond Bar at Iowa Hill, and Homestake near Forest Hill. Among the drift mines now being operated are the Morning Star of Iowa Hill, the Dardanelles, Mayflower and Gray Eagle of Forest Hill, Hidden Treasure of Sunny South, Breeze and Wheeler of Bath, and Mammoth Bar near Auburn. With one or two exceptions the entire mining districts on the divide are given over to general enterprises.

EL DORADO COUNTY was one of the twenty-seven into which California was first subdivided in 1850. To it belongs the honor of having been the scene of the great discovery which pushed every human enterprise ahead. It was where the Argonaut first saw California soil after making his journey across the plains, and to-day many an old Californian, now in the Eastern States, associates his idea of California with what he saw and knew of El Dorado in the early years, that being all of the State he ever saw. Her mines have from the first kept pace with the foremost in the State, and are still being worked perseveringly and with success. Quartz, gravel and cement claims are being operated successfully and cheaply by means of electricity as a motive power, reducing the cost of operating to a minimum, enabling the operator to work low-grade ores with a profit, and largely increasing the output.

Coloma was at first made the county seat of government. When the placers had been worked out, and the importance which these had given it subsided.

Placerville, originally "Hangtown," was selected as the county seat, and there it will remain. Although in the beginning most of the towns were founded and supported by the mines, yet many of the inhabitants made their living by farming. Money was flush, vegetables were a great luxury, and the soil was rich. Potatoes and other products were sold for fabulous sums, and in a short time the farmers were the reigning element of the community. With the decline of mining, however, involving the death of so many camps, the vitality of the larger places rapidly declined, and by 1880 less than 11,000 remained of a population which in the early fifties numbered over 20,000. But farming, and notably horticulture, stepped into a channel of slow, though steady growth, and the fruits of El Dorado have won high reputation for their excellent quality, thus materially assisting in the upbuilding of the county.

The forests of sugar pine are very extensive and are being manufactured into lumber for home and foreign markets. Within the past year several companies have erected large mills in the timber belt, which gives impetus to business. Among them is the American River Land and Lumber Company, which owns 10,000 acres of timber land. This concern has built ten miles of railroad to carry logs to the American river, whence they float them to Folsom, where they will be manufactured, creating an industry which adds greatly to the prosperity of the county.

The only slate quarries being worked in the State are located within four miles of Placerville, where an inexhaustible quantity exists, easily obtained and equal in quality to any in the world. The annual

output is enormous, making an industry that will always be a source of profit to the county.

Orchardists are paying special attention to the improvement of their orchards, and in the selection of good shipping varieties to meet the demands of the markets. A large increase has been made in acreage during the year, and shipments have increased sixty per cent over last year. One hundred and thirty-four carloads of 21,000 pounds each of green fruit were shipped from Placerville alone this season. Wine grapes grown here are sought after by wine makers in the valleys, because the mountain fruit makes a better wine than that of the valley. The soil of El Dorado county is well adapted to the raising of grains, hay and vegetables, producing quality and quantity equal to any mountain county in the State. The increase in wheat is especially noticeable, caused by the erection of a flouring-mill in Placerville, making a home market for all that can be produced, and insuring good prices. The future of El Dorado county in agricultural products is assured.

Activity in manufacturing enterprises is specially marked. The most noticeable is a flouring mill, built in Placerville by the El Dorado Milling Company, equipped with a complete outfit of the most modern and improved machinery, with a capacity of sixty barrels of flour per day. Bleur & Co. have erected a manufactory for builders' materials, boxes, doors, blinds, etc. Two fruit houses have been added to meet the demands of shippers and keep up with the increasing supply of fruits for shipment.

Railroad facilities have been greatly improved. The Sacramento and Placerville branch of the Southern

Pacific Company has been extended to Placerville. It has assisted in developing business until it is not always convenient to obtain cars when wanted at some of the rapidly growing stations on the road.

SONOMA COUNTY, the locality of the famous Bear Flag war, is another of the original counties. Once, indeed, the district called Sonoma included all of that country west of the Sacramento river and north nearly to the Oregon line. When county divisions were made it still occupied all that is at present Mendocino, and most of what is now Napa. In 1859 Sonoma was reduced to its present size. The name Sonoma is an Indian word, signifying "Valley of the Moon." It originated with the Chocuyen Indians, but was suggested by Father Jose Altimira, who came there in 1824 to establish the first mission.

The first trip into what is now Sonoma was made by Captain Quiros when, on a voyage of discovery, he sailed up Petaluma creek in 1776, seeking its course. In January, 1811, Bodega bay was visited by a Russian from Alaska named Alexander Koskoff. He liked the country and took possession of a strip of land probably in both Sonoma and Marin counties, whereon he settled in spite of Spanish protests. Koskoff staid on the land, and in five years had a settlement with twenty-five Russians and eighty Kodiac (Alaskan) Indians. They erected a barricade for protection, and made hunting and trapping expeditions for considerable distances inland and north and south. They planted orchards and erected a church, raised grain, worked in leather, wood and iron, and had a good trade with Sitka.

In 1823 Father Jose Altimira and Don Francisco Castro, under military escort, commanded by Jose Sanchez, started to Sonoma's territory to establish a mission there. Their explorations were continued over a great area, and finally a site was selected, called New San Francisco. It was in August of 1823 that the construction of buildings was commenced. Three years later the Indians destroyed the mission and Father Altimira barely escaped with his life. Under Father Fortuni the mission was rebuilt, and was again in permanent shape in 1830. In 1832 the Indians were freed, and the lands divided up. Next year the small-pox scourge broke out, when it is said 60,000 Indians in the territory now included in Sonoma, Napa and Solano counties, perished miserably.

Settlers came to Sonoma very rapidly between 1835 and 1840. The Indians continued hostilities, but in spite of their depredations the country began to thrive, and sheep and cattle raising and agriculture flourished. The military government of the State was now under General Vallejo. He was ordered to extend the settlements to the northwestward, and so made several grants of land to emigrants. These Anglo-Saxons were beginning to come in, were opposed by the Russians, who still held sway at Bodega bay and Fort Ross. Difficulties soon arose and the Anglo-Saxons were constantly getting the best of the situation. The Russians finally appealed to General Vallejo and Governor Alvarado, urging them to buy their partially improved possessions. This was declined, when they effected a sale to John A. Sutter in 1840, and then abandoned the homes that they had held for upward of thirty years. The bands of American settlers, who

were soon to control the whole country, commenced to flock in more rapidly, and they soon began to establish more modern ideas. About 1841 a Captain Stephen Smith, of the bark George and Henry, saw the need of lumber and grist-mills in the new country. He embarked for the Atlantic, and after a couple of years returned with the necessary machinery. He landed forcibly at the old Russian possession, being opposed by Captain Sutter. There he got lumber and erected mills near the redwood forests. Finally the buildings were completed and the whole country was invited to come and see the start. Everything worked to perfection. Lumber was sawed and wheat was ground into flour. Bread was baked, cattle butchered and a splendid banquet was held. The pioneer mill was a success. Smith ran his machinery until 1850 and then sold out. Subsequently the mill was taken to Mendocino county.

Before the war was declared between the United States and Mexico, trouble had started a number of times between Mexicans and Americans in California, owing to attempts of the former to expel the latter from the territory. Americans had been imprisoned and proscribed, but they were arriving in great numbers, and their progress was resistless. Mexico and her subjects were becoming alarmed. A congress or junta was called, and serious discussions were had over a proposal to have France or England assume a protectorate over California to the exclusion of the Yankees. General Vallejo strenuously opposed any such movement, and withdrew from the junta. Governor Pio Pico was much in favor of ceding the country to a foreign power. Vallejo had at this time retired to his

country home in Sonoma county, after having occupied the most prominent positions in the State. Fremont had come to California a little before these troubles. He had a small but intrepid following of soldiers. Dissension had arisen between Governor Pio Pico and General Jose Castro. The latter was a power in the community. He gathered horses, men and arms to proceed against both Fremont and Pio Pico, as both had defied his authority.

An uprising being feared Pico communicated with Castro, asking his assistance for the general strife against the Americans. Lieutenant Arci, under com mand of General Castro, left Sonoma with the horses to go to Santa Clara. He crossed the Sacramento river at Knight's Landing, and told Knight's wife, who was a Mexican woman, what he intended to do. Mrs. Knight told her husband. Knight immediately rode to Fremont's camp with the information. This was on June 9, 1846. A party of eleven men under Ezekiel Merritt started in pursuit of Lieutenant Arci at once. They were joined by others on their way, and received information of Arci's camp. They proceeded under cover of darkness to within a short distance of the lieutenant's quarters. In the early morning following they captured Arci and all of the animals. Arci and his men were given an animal apiece, and told to depart and say to General Castro that he could have the horses when he would come and take them. The party then rejoined Fremont, having ridden 150 miles in forty-eight hours.

It was now decided to be unsafe to do anything but proceed. They determined to capture Sonoma City and its garrison at once, before Lieutenant Arci could

reach that place. They accordingly set out June 12 at 3 o'clock on the ride of 120 miles. The company received reinforcements, and numbered thirty-three men. June 14, at daylight, they surprised the garrison at Sonoma and captured everything. General Vallejo was made a prisoner along with other illustrious Mexicans. There were ten pieces of artillery at the garrison, and much ammunition and other arms. The victors, who then unfurled the famous Bear flag with a huge grizzly, a lone star and the words "California Republic" upon it, carried their prisoners off in triumph to Sacramento, and locked them up for sixty days. The prisoners were taken away on horses furnished by General Vallejo himself. The handful of patriots formulated a proclamation whereby they declared California to be a free republic. It is related that the guard who accompanied the prisoners all went to sleep at a camp on the way, and forgot to leave a sentinel. In the night a party of Mexican rancheros came into camp, woke the general, and told him that they could surprise the Americans, kill them all, and declare war, if he thought best, and would command them. He declined, saying that he would go with his captors, that such action could only entail the eventual ruin of their homes, and he thought that everything would soon be settled.

The victors at Sonoma found, after their excitement had abated, a Mexican flag floating over the citadel. They hauled it down and after considerable discussion decided upon the "Bear flag." A piece of cotton cloth was obtained upon which a man named Todd painted the star with red paint. The bear and words "California Republic," or "Republic of California," were

afterwards painted and the flag hoisted amid shouts and excited hurrahs. On July 9th following, the American flag took the place of the bear flag. The officers of the fort found themselves short of powder, and, as they had determined upon California's independence, and were making preparations for a long fight, they sent two young men, named Cowie and Fowler to Santa Rosa for the ammunition. The young men were captured by Mexicans, and most foully tortured and murdered. Two of the murderers were afterwards killed.

General Castro made an appeal to all Mexicans to fight for the country against the Americans, and got together a force with which he started toward Sonoma. Some of these forces captured two men belonging to the fort at Sonoma, one being Todd, the bear flag artist. A Captain Ford and fourteen men pursued the Mexicans, surprised them at a ranch, killed nearly a dozen, and rescued the prisoners. Fremont and others, with a considerable force, now joined issue with the Sonoma garrison. Castro left forces near Sonoma's territory, but himself escaped to San Francisco, from which place he commanded his small army. Several of his spies, sent to reconnoiter, were captured and shot. One bore a letter to Captain de la Torre, instructing him to kill every American, man, woman and child, found. De la Torre's forces soon after escaped to Yerba Buena (San Francisco). News reached Sonoma garrison on July 10, 1846, that Commodore Sloat had taken Monterey on July 7, and that war had been declared between the United States and Mexico. The bear flag was pulled down, and stars and stripes run up, and the bear flag war was ended.

Sonoma is another of the counties abounding in the

great redwoods, and lumbering has formed one of her important industries. Her hills and valleys are exceedingly beautiful. The valleys, particularly, are among the finest in the State. The principal ones are the Sonoma, Petaluma, Santa Rosa and Russian river. This county has made the most material development of any coast county during the year 1892. Five years before the chief industry was grape-growing. The low prices of wine and grapes have gradually driven the grape-growers out of the business and their attention has been turned to the more lucrative business of prune and general fruit-growing. Hop-growing has also been going forward with gigantic strides during the past few years until Sonoma county has become the Mecca of California and eastern brewers. From a fruit standpoint the county was very prosperous in 1892, the revenue from this source exceeding that of the year before by more than $34,000.

The branch line of the San Francisco and North Pacific railroad terminates at Sebastopol, seven miles west of Santa Rosa, and it has given an impetus to business which nothing but a railroad can do so effectively. Further westward is the great dairying district of this county. Thousands of pounds of butter and cheese are shipped from this section to the eastern States. The sawmills in the dense redwood forests in the northwestern part of the county have cut more timber in 1892 than in the year previous by 2,000,000 feet, and Guerneville has shipped more freight, mostly dressed lumber, than any other town in the county. The quicksilver excitement of twenty years ago in the Pine-flat country is being revived in a modified form, and shafts are being sunk with good success in the dis-

trict supposed to have been worked out years ago. There is no doubt but there is paying ore there, and capitalists are organizing to get it out.

The recently discovered coal beds on Mark West creek, five miles northeast of Santa Rosa, are being developed by practical men. Some thirty or forty men are tunneling now, and a large force will be put on in the spring. These coal fields have been thoroughly tested, and the supply is inexhaustible. Either an electric line or branch of the Donahue system will be built to carry the coal to market.

This county now has three distinct lines of railroad, with communications on the west and south; still the lines are not adequate to drain the county of its multifarious products. A scheme that will surely carry is on foot to build an electric line from Santa Rosa to Tidewater, a few miles below Petaluma.

Santa Rosa is the county seat, and it is beautiful and prosperous almost beyond description. Its citizens are cultured, and Santa Rosa's reputation as an educational center is as broad as the State.

The city of Petaluma, situated at the head of Petaluma creek, has made more progress during 1892 than during the previous ten years. The Currier-Carlson Silk Company has planted itself permanently in a splendid brick factory that will give constant employment to a large number of persons. A boot and shoe factory is one of the late improvements, and a starch factory is now under construction. Deep-water communication has attracted the attention of factory men, and it is now a city of factories. The increase in population has been very heavy, business has been brisk, and there is hardly an idle man in its limits.

This is the great shipping point of Sonoma county. Silk culture is a new industry that has sprung up during the past year. Healdsburg, Cloverdale, Sonoma and Guerneville, showed a large increase in business over 1891, and the prospects for an even more prosperous year for 1893 are very bright. The prospect of inducing the Government to widen and straighten Petaluma creek, and dredge Bodega bay, is good. These improvements would be of incalculable benefit to Sonoma county.

NAPA COUNTY was not one of the original twenty-seven subdivisions of the State. It was organized in April, 1857, and from territory which had been reclaimed from the Indians, Napa city being built on the site of a village formerly occupied by the Napa tribe of Indians.

George C. Yount was Napa's first white settler. He estimated that there were 5,000 Indians in Napa valley when he went there in 1831, but most of them succumbed to the smallpox epidemic which swept off so many thousands in 1833. Yount spent most of his time in hunting and trapping when he first came, as game was very plentiful. He built the first log cabin house erected in the State by an American. That was in 1836. The hut was eighteen feet square below, and had an upper story twenty-two feet square, in the usual block-house fashion. He left portholes in the walls, through which he frequently defended himself from the Indians, who were very troublesome at that time. It was a number of years after Yount's time before any more permanent settlers came to Napa.

Those who did come, about 1839-40 and later, acquired land near Napa City's site. In 1841 a noted Russian naturalist named Wosnessensky visited the country and left a copper plate on the summit of Mount St. Helena. Afterward the United States geological surveyors removed it to preserve it.

Napa never was a mining county and, with the exception of a few quicksilver deposits, there have been no valuable minerals found in her limits. Several mineral springs exist in the county, of which the Napa Soda Springs is the most prominent.

The grape, wine and brandy industries of Napa have brought that county prominently to the front in the last few years. It is generally conceded that Napa leads in winemaking which is now so important an industry to the State. Probably her sandy soil and warm hillsides contribute more than anything else to the success of her vineyards. Grain in Napa also does exceedingly well and many very large farmers devote much land to its culture. In the orchards all fruits thrive no less successfully than do the grapes. The wine cellars of the county, which seem to be almost as numerous as the ranches, are some of the very finest in the United States. A great number of them are constructed of stone, and others are large, deep tunnels dug in the side of the hills. These latter, penetrating solid rock, are always clean, dry and cool.

One of the finest properties of the county is the Suscol ranch, founded long ago by General Vallejo. The fruits and nuts from that place have yielded immense profits. The Suscol was the scene of a very active and sanguinary battle between Indians and a gallant little band of soldiers under General Vallejo in 1835.

The general only lost two men killed, several being wounded. The troops killed over 200 of the Indians. The savages were still for war, but the arrival of reenforcements for the Spaniards quieted them.

The great and promising industry of the county is the growing of olives. Mountains and hills heretofore deemed of but little value, and that only for grazing purposes, are being planted to olives, and the hardy trees are doing so well that others are encouraged to follow the example of the pioneers in this industry. So firm a hold on the attention of the thrifty farmer has the industry attained that it promises to become a leading industry of the vicinity, and that ere long.

YOLO was made a county in 1850, and Fremont was designated as the county seat. The name is a corruption of "Yo-doy," meaning tule land. William Gordon settled in what is now Yolo county in 1842. In 1843 the Mexican government granted him a peice of land one league wide and two leagues long, and described as being along "Jesus Maria river," now Cache creek, deriving its name from the hunters' habit of cacheing furs along its banks. A number of other white settlers selected places near Gordon's ranch, and in 1845 wheat was harvested there, and considerable stock raised. Nathan Coombs was the father of the first child born there.

When the gold excitement broke out, nearly all the male residents of Yolo left for the mines. The next year they began to come back. Jonas Spect brought a schooner load of merchandise from Sacramento, and the town of Fremont was started. After a few months

it was again deserted and but two tents occupied by white people and a few Indians in adobes, remained to mark the site. When the winter drove the miners down into the valley, Fremont had a population of 1,300.

Recent years have seen important works of reclamation and improvement, with a general fostering of naturally abundant resources, until to-day Yolo is unsurpassed as a happy and prosperous farming community. A productive soil, a sufficient water supply, a climate favorable to vegetable life, fine transportation facilities and superior educational advantages are the resources which, combined, have placed Yolo in the list of the leading counties of California. In an annual rainfall of sixteen inches there is a guarantee against crop failures, and drouths are unknown.

In Capay valley, the Tancred and other colonies, which were disposed of to eastern farmers, are a picture of thrift and enterprise. Residences have been erected by the colonists, and the farms are in a splendid state of cultivation. The colonies established by the Capay Valley Land Company are also advancing rapidly.

SACRAMENTO COUNTY is one of the most historical in the whole State. It was the seat of business of the interior in pioneer days, and the center from which the miners started and to which they nearly always returned. Sacramento city is inseparably linked with the bustle and furor of the gold excitement, and the discovery that set the world afire was directly attributable to the settlement of that city. Sacramento's

history is the story of Captain Sutter, whose enterprising spirit it was that directed its settlement in the midst of trials and dangers that were too much for his first supporters.

Sutter came to the United States from the Duchy of Baden, where he was born in 1814, landing at New York. He came West almost at once and settled in Missouri. In 1838 he went with a party of hunters and trappers to Oregon. He wanted to reach California, but this was then a hard matter. First he went to the Hawaiian islands, and from there to Sitka. He sailed the vessel which took him to Sitka down to San Francisco bay, arriving in 1839. The Mexican officials notified him to get out of the country, and told him that Monterey was the port of entry. At Monterey Governor Alvarado signified an eager readiness to let Sutter settle on the Sacramento river, as the Indians were very hostile. Sutter returned to San Francisco and chartered a schooner to go up the river. No one could tell him where to find the Sacramento, and he was eight days hunting for its entrance to the bay. He and his party proceeded up into the Feather river, but the dangers of its channel compelled him to return to the Sacramento. At this juncture three of his white men left, and returned to Yerba Buena (San Francisco). Others remained with him, as did a lot of Kanakas whom he had brought from Sitka.

Sutter immediately commenced the erection of a fort to protect himself and party from the Indians. He afterwards embarked in agricultural ventures with great success. In 1840 several white men who had come across the mountains joined Sutter, and his

settlement soon received numerous other acquisitions. That year the Indians were unusually warlike, and a battle ensued in which the natives were routed.

In June, 1841, Sutter was declared a citizen of Mexico, and the land at his place, called "New Helvetia," was granted to him. It comprised eleven square leagues of territory. Every new arrival, foreign or otherwise, who came near joined Sutter's party, and New Helvetia grew in prosperity every day. When the war broke out with Mexico, Sutter, although a Mexican officer, extended every kindness and courtesy to the Americans and their forces. He readily hoisted the American flag before the war was closed, and afterward, when his fort was garrisoned by Lieutenant Missoon, of the United States navy, Sutter was put in command.

Prosperity increased after the war and Sutter started new enterprises. In the latter part of 1848 he had over a thousand acres in wheat; he had erected a saw-mill at Coloma (the famous Marshall city) and had nearly finished a large and expensive gristmill at the fort. Then one of his men, Marshall, found the yellow metal at the saw-mill, and this marked the commencement of Sutter's downfall. His employes deserted him immediately, the grain crop went to ruin, and he lost twenty-five thousand dollars on the first mill, which could not be finished. A large tannery was also abandoned with quantities of leather in the vats.

The rush of immigration commenced at once, and Sacramento became one of the liveliest and most cosmopolitan cities that the United States ever saw within so short a period. The wondeful times when men grew wealthy in a few days were fairly started,

Sutter now began to lose everything. He had no men left to protect his interests, so that his horses, cattle, hogs, lands, everything, were appropriated. Sacramento city commenced about Sutter's Fort as soon as the excitement was well spread. The first survey was made in December of 1848. Sutter and others determined to start a town before the discovery and did so. It was called Sutterville. This village flourished until Sacramento was started as a rival. Consequent upon the indiscriminate flocking of all sorts and conditions of people to the new town and the meager shelter that the tents and rude huts afforded, there was a tremendous amount of sickness in the place soon after things got started. Attendance, protection and medicine cost heavily. Men died by the score. Coffins were an expensive luxury and many were buried in blankets. In the fall the rains and floods came, adding to the misery. The excitement was unabated, however, and hundreds of new comers arrived each day, and buildings went up like magic. As soon as people began to settle upon land the "squatter troubles" commenced. Many innocently occupied lands long before granted by Mexico to holders of large tracts, and spent much money and time thereon. Others thought they could beat the Mexican title, and many did so. Some bought their lands, but litigation and trouble started everywhere. No one respected any title which conflicted with his own. A party of citizens at last decided to remove a lot of shanties and cabins that obstructed the river levee and they tore the flimsy abodes down right over the owners' heads. A riot ensued at one time and several people were killed. This and others were called "squatter riots," as the organized squatters were

conducting the offensive measures. A suit was brought and the judgment, even on appeal, was against the squatters. Other riots broke out immediately, and murders were committed every day. Several of the city officers, including the sheriff, McKinney, were killed. The citizens organized and military aid was sent from San Francisco. The squatters were finally overcome.

Amid all of the excitement and tribulations Sacramento county was organized by the Sacramento legislature at San Jose, and Sacramento city was made the county seat. The capital of the State underwent many changes of locality in the next four years. San Jose was too small to accommodate the officers and attaches of the first session, hence the next meeting was called at Monterey. Vallejo and Benicia then started a war over the seat of State government, and both were at different times the capital of California. Sacramento offered the use of its court-house and vaults, and ultimately secured the legislature. This was in 1854. The supreme court judges decided that San Jose was still the legal capital and caused the records to be removed to that city. Some new judges decided that Sacramento was the capital, and then preparations were commenced for a Capitol building. Various plans fell through, and it was 1860 before the building was commenced. The structure was to be finished in ten months, but it was 1869 before everything was completed.

During the past year the progress of Sacramento has shown a marked improvement over that of the previous year. While no booms or spasmodic advancements, with consequent depressions, have occurred, yet

a steady and continuous progress has been made. This is particularly noticeable in the freight shipments. One of the most important steps taken by the city during the past year was the permanent improvement of the levees. Several months ago individual members of the board of trade organized themselves into a levee improvement committee and through their strenuous efforts the board of city trustees decided to call a special election, at which bonds to the amount of $100,000 were voted to raise and improve the levees. Since then the levees have been strengthened and raised and a feeling of absolute security from floods now prevails.

According to the figures furnished by the Southern Pacific Company, the total shipments of fruit from Sacramento during the year aggregated the enormous amount of 161,368,000 pounds, which is almost twice as much as shipped from any point except San Francisco. The total shipments of deciduous green fruit exceeded the tonnage of the previous year by nearly 50,000,000 pounds. According to a well-informed authority Sacramento stands first in the amount of tonnage of green fruits, second in the shipments of potatoes, vegetables, raisins and beans, and third in shipments of canned and dried fruits. It is a noticeable fact that the shipments from Sacramento during the past year amount to more than 21,000,000 pounds in excess of the shipments from the entire State in 1888, and 11,000,000 pounds more than the entire shipments from California in 1889.

During the year a vast amount of building has been done in the residence portion of the city. Among the new buildings may be mentioned the post-office, which

is rapidly nearing completion. This building is situated at the corner of Seventh and K streets, and will cost $150,000. It is a model of architectural beauty, and when completed will be one of the most imposing structures in Sacramento. It is the intention of the designers to make it one of the most complete post-offices in the State. In the business portion of the city a number of extensive improvements have been made.

At the State capital very many fine improvements have been made. Electricity has been introduced into the building, while the Senate and Assembly chambers have been refitted and remodeled. The Governor's office and the State library have also received the attention of artisans.

At the present time a project is on foot to annex Washington township to Sacramento. A number of business men of the city have taken the matter in hand and are working industriously in the interest of annexation. As was expected, the proposition has been met with considerable opposition by a majority of the residents of Washington. They seem to think that they can take care of the little town across the river without the guidance of the people of Sacramento. Several joint meetings have been held, but the scheme is as far from being consummated now as it was several months ago.

Since the first of the year two electric railway lines have been built in Sacramento. One is known as the P street line, the other as the K street line. The Folsom Water Power Company has secured a franchise to build and operate an electric road, and when this is completed all parts of the city can be easily

reached. The Southern Pacific Company is contemplating the erection of a new freight depot. The present site is considered inadequate, and it would not be surprising to see the preliminary work of a new depot commenced in the immediate future. Other notable improvements are spoken of, but it is doubtful if they will be commenced before next year.

AMADOR COUNTY was organized from a portion of Calaveras county in 1854. It contained the liveliest camps in the State during the early mining days, notably Ione valley and Mokelumne hill, at least one man being killed during Saturday or Sunday for seventeen consecutive weeks. At Jackson was a live oak which became famous as "hanging tree," so many criminals having expiated their offenses upon it. In 1862 it became injured by fire, and had to be cut down; but it was perpetuated by being engraved on the county seal.

Staging was started in 1853 between Sacramento and the Amador mines. The fare was $20 each way. Horses cost from $300 to $600 each; stages from $1,000 to $3,000; drivers received $150 per month, and hay cost $100 a ton. Up to 1860 the placers were panning out millions in gold, the quartz mines began to show great richness, and agriculture was taking a permanent stand. Churches and schools sprang up in every settlement. Then came the rush to the great Comstock, and to Frazer river in British Columbia, and Amador was depopulated almost as rapidly as it had filled up, when the excitement of gold-finding in her own borders in 1849 began. Before many months they began to return.

Hydraulic mining started in Amador as early as 1853-4. Tin pipes were used, with a pressure of about thirty feet. This method of mining soon advanced to the wonderful completeness that afterwards made it so marvellously effective, and sent mountains scurrying down the streams, creating an antagonism on the part of valley ranchmen which finally caused the suppression of hydraulic mining. Quartz mining has been continued in Amador and some large deposits of rich copper discovered and worked. The quartz mines are on the "mother lode," and the hope is perennial that it may be struck rich any day, resulting in another Comstock. The old mines are prosperous, and new ones are being opened. Increased acreage is being planted to fruit, and the prosperity of the county is on a sound basis.

MARIN COUNTY is as it was established by the original sub-division, one of the smallest, but with a greater coast line than any other county in the State. It shares proprietorship with San Francisco in the world-renowned Golden Gate. Beautiful San Rafael has been the seat of government since the organization of the county.

Marin has its name from a chief of the Lacatuit Indians. He and his braves conquered the Spaniards about the years 1815 and 1824, but Marin was finally captured. He escaped and took refuge upon a small island in San Francisco bay, and his name attached to the mainland to the north. Geographically, Marin is a peninsula, and a very rugged one at that. Its western coast, rocky, barren and steep, is very dangerous to navigation. Inland the majestic peak of Mount

Tamalpais, nearly 5,000 feet in elevation, is a notable and picturesque landmark for the country for miles around. The name is said to have originated from the residence of the old Tamal Indians near its base long ago.

If ancient history makes no errors it is likely that Sir Francis Drake was the first white man to visit what is now Marin county. Also, if he did enter the little bay named for him, it is likely that the Golden Gate of to-day did not then exist, and that an old Indian legend that an earthquake rent the coast asunder there is true. Otherwise it seems scarcely possible to explain Drake's failure to discover it. It is undisputed that in 1595 Sebastian Cermenon was wrecked near Punta de los Reyes (Point Reyes). In 1602 Sebastian Vizcaino found the wreckage, which he described as being in the port of San Francisco. This makes it seem as if the big bay did not exist at that time, and the little Drake's bay was called San Francisco port.

Descending to days that sound more modern the histories and records of Marin claim the first house built in the State, north of the bay of San Francisco. It was a lone structure erected about the year 1776 at an Indian settlement called Olompali, near the Sonoma line. Some traveling Spaniards found the Indians, and in return for hospitalities taught the savages to make huts. It was the father of Camillo Ynitia, chief of the tribe, who constructed the house. Indian remains are still to be found near old Olompali, and many relics have been unearthed there.

In 1817 the Mission San Rafael was founded by Father Ventura Fortuni. By 1842 the mission was

almost destroyed. There had been hundreds of the Jouskionmes Indians at the mission up to 1834, when their numbers began to dwindle. A few years later a hostile tribe drove the holy friars away from the county.

John I. Read was the first white settler who remained in the county. He took up his residence in Sausalito in 1826, and afterward went to Sonoma county, returning to Sausalito in 1832. He plied a small boat, the first ferry on the bay, which he ran between his place and Yerba Buena or San Francisco. In 1834 he received a grant of the rancho "Corte Madera del Presidio" from the Mexicans, and erected the first saw-mill in the county, the framework of which is still standing at Mill Valley. Before 1840 several more settlers came to Marin. This last year brought a number of early pioneer adventurers to the county. Quite a number of Mexican grants were made to various men and families, who settled all over Marin before the war with Mexico broke out. Afterward the gold chase brought many people into the northern portion of the county, but that section was not much settled until 1852.

The cities and towns of Marin are as pretty and picturesque as any in this wonderful State of flowers and sunshine. San Rafael, with its old traditions of a mission established in 1817, with its orchards, vines and roses, surrounded by the warmest and greenest of hills, is still the most important city in the county. Sausalito, snug from the Pacific's wind and fogs, perched romantically upon the hillside, is a general favorite as a summer resort and a retreat for city-wearied people. The whole of Marin county, from

the rocky, stormbeaten coast of Point Reyes, to the majestic summit of Mount Tamalpais, and beyond to the verdant hills and undulating valleys, presents a picture of beauty, happiness and comfort.

The larger proportion of Marin county is hilly, but the hills are covered with verdure, kept green by the heavy dews from the ocean nearly the entire year, and make splendid pasturing for the immense herds of fine dairy cattle which supply San Francisco with milk. Where planted to grapes, the finest are produced from which the best flavored clarets are made. In an hour's ride of San Francisco are virgin forests of redwood, and Sequoia canyon is said to contain 1,000 acres of these rare trees, from which few have been cut. It ought to be retained unmutilated for the benefit of the millions who will inhabit San Francisco and Marin counties in the future, when the redwood and the buffalo have become traditions, and who will appreciate the grandeur of these symmetrical trees, whose swaying crowns are kissed by the passing clouds.

The towns of Point Reyes, Tomales and Novato are in the center of the dairying district, carrying on a brisk traffic in dairy produce, at which places there have been several large creameries established to meet the constantly growing demand for butter and cheese. Sausalito, Belvidere, Mill Valley and Larkspur, are much sought for as resorts for pleasure and home building. Bolinas, an obscure little town, is beautifully situated on the shore of Bolinas bay. Outside of Marin county, probably very little is known of it, as it has not as yet any railroad communication with the outside world. Its locality abounds in natural resources, chiefly mineral, and it is to be regretted that

they are undeveloped. The bluffs, extending for a long distance up the coast, are deeply streaked with rich veins of bitumen, resembling the Santa Cruz formation. At the base of these bluffs may be seen tiny springs of petroleum bubbling from the earth, while the atmosphere in that vicinity is redolent of the odor of coal oil, denoting a large flow of that valuable commodity.

A few yards from the shore, on Duxbury reef, is a constant and extensive supply of natural gas, which forces itself from the living rocks, and when ignited, a number of jets of flame, some several feet in height, are plainly visible. Prominent State mineralogists have pronounced it in unlimited supply. Farther inland, in the high ridge of hills overlooking Bolinas, are rich copper leads, as in some places specimens of the blue mineral may be found on the surface. Large coal beds also exist here, and were being worked by private parties a short time ago, but for want of capital and lack of transportation facilities, were abandoned. With a railroad, Bolinas as a pleasure resort would rival the most popular watering places on the Pacific coast. Its surf bathing surpasses that of Santa Cruz, and it has also a pebbly beach which is much larger and where can be found finer pebbles than at Pescadero, while its climate is absolutely delightful. Marin county is slowly progressing, but with a railroad to Bolinas, which will open new resources, her prosperity will be increased immeasurably.

SOLANO COUNTY has more miles of navigable waters washing its soil than any inland county in the State. It surrounds Suisun bay, and its south-

east boundary is the Sacramento river. Solano was declared a county in 1850, but it was two years before the organization was perfected. Solano had its name from an old Indian chief, and he was named by the missionary, Francisco Solano, who christened him when he embraced the Christian religion. Chief Solano was given the Suisun grant, containing 17,700 acres. The members of the tribe of Solano, previously called Sem Yete, had their headquarters at Rockville.

There are no mountains in Solano, but many good sized hills, and these are very productive. Very little gold or other valuable mineral has been found in the county. Building stone, some marble and large quarries of basalt rock, are utilized. But as a fruit producer, Solano county has obtained high reputation. The first California fruits presented to the Queen of England were sent by the great and successful horticulturist, A. T. Hatch, one of the World's Fair Commissioners, and were acknowledged as follows:

OSBORNE, 13th August, 1892.

SIR:

I have received the commands of the Queen to convey to you the expression of Her Majesty's thanks for your attention in sending, as an offering to Her Majesty, a case containing pears, peaches, nectarines, prunes and plums, from California, which she has been pleased to accept. I should mention that they arrived in good condition, and that they were served at the Royal table.

I am, Sir, your obedient servant,

J. C. COWELL,
Master of the Household.

MR. A. T. HATCH,
Suisun, California.

The pioneers of Solano county were the family of William Wolfskill. Wolfskill came to California in 1828, but settled upon a Mexican grant of four leagues of land upon the Rio de los Putos, in Solano, in 1842. There were only four white families in the county in 1846. The valleys then were covered with a splendid growth of wild oats, and herds of wild cattle and horses roamed with bands of elk and deer.

After the success of the American arms over Mexico there was much bitter litigation over land titles. Considerable blood was shed over disputes which occurred out of court. Six of the Mexican grants, some of the largest of which were overthrown, covered nearly all of the arable land in the county at that time.

In 1848 Benicia was visited by General W. T. Sherman. He found a solitary adobe house there, occupied by a Mr. Hastings and family, with Doctor Semple, proprietor of a small ferry-boat. Benicia started out to be the metropolis of the State. It was incorporated in 1849, or 1850, as a city, at about which time the government located its barracks there. In 1852 the Pacific Mail Steamship Company erected works there. In 1859 Benicia was, for a time, the State capital, and for a long time it was the county seat. The town erected quite a pretentious State building at its own expense, but it soon lost the capital, which was removed to Sacramento. In 1858 the county seat was removed to Fairfax. The Pacific Mail Company also left and came to San Francisco. Benicia hardly sustained the shock of so many removals, but finally recovered.

There are prosperous little towns all over the county

of Solano, but Benicia and Vallejo are the most important. In Rockville, the old camp of the Indians, the first blacksmith shop in the county was erected in early days, by John M. Perry. This brawny smith produced several rude plows, which he sold for sixty-five dollars apiece. The leading towns of the county show an improved condition of affairs, particularly Vallejo, Vacaville and Dixon, and while other towns have not shown such great advancement, they have held their own. Besides having to her credit a number of industries of which any town might be proud, these have had a very prosperous year. The greatest projected enterprise, the realization of which means more for Vallejo than anything else, is that of bringing pure crystal mountain water into the town, in a system to be owned by the city. The source of this system is at the great Vallejo falls, about fourteen miles distant in an air line. The estimated cost of the plant is $250,000. The people have already given a two-thirds vote in favor of the issuance of the bonds, and the work of surveying, and preparation of plans, specifications and estimates, is completed. With the completion of this new water system, in which the Navy Department of the United States has manifested an equal interest with the people of Vallejo, the town looks for more good things to come.

CONTRA COSTA COUNTY was one of the original subdivisions of the State. According to General Vallejo it means "opposite coast," and was deemed appropriate because it was opposite San Francisco. It contains 750 square miles, divided into 450

of hill and mountain, 190 of valley, and 110 of marsh and tule lands.

The Mount Diablo range of mountains, with the great isolated peak itself, are prominent features in the typography of Contra Costa. The peak stands almost alone in the center of the county, and rising so abruptly possesses many advantages of observation. An interesting tradition of the origin of the name exists in Contra Costa's store of legends. When the old Spanish Padres controlled the whole country they were visited by some Indians who brought nuggets of gold from Diablo. The natives already had inherited stories of a former vomiting of smoke and fire from the peak. The padres, to prevent them from depleting the hill of its golden treasures, took the gold, and, placing it in a tub of water which had been secretly poisoned, told the Indians to let their dogs drink the water. The animals satisfied their thirst there, and immediately died. The padres drew a harrowing picture of the destruction sure to follow if the Indians still sought the gold, and the vivid example of the death of the canines completed the fright of the simple aborigines. The gold was therefore unmolested by the savages, and the name of Monte Diablo,—"Devil's Mountain"—readily attached to the mysterious hill.

Contra Costa and Alameda counties are closely united in their histories. They shared the same early explorers, settlers and traditions, and large tracts of land have belonged to both prior to the division that marks their present boundaries. In 1823, Francisco Castro and Ignacio Martinez made application to the Mexican authorities, the first for the San Pablo Rancho, the last for the Pinole Rancho, each four leagues in

extent. These were the pioneer settlers of Contra Costa. They erected adobe houses, fenced off corrals for their cattle, planted their vines and orchards, and started in at extensive reclamation of the wild country. Among their nearest neighbors were the Peraltas family, who then owned nearly or quite all of Alameda county, and the Castros at San Lorenzo. A number of Mexican families followed in the next few succeeding years, generally applying for and acquiring tracts four leagues in extent. In 1835, thirty citizens of this portion of California petitioned the government, then at Monterey, to permit them to attach themselves to San Jose for judicial purposes. After considerable "red tape" the petition was granted. The first American settler was Dr. John Marsh, who purchased the Los Meganos Rancho in 1837. By the year 1846, when war broke out between the United States and Mexico, a considerable number of immigrants had come to settle in the valley of Contra Costa. At that time an estimate places the total of Americans in California at 700.

Martinez, the beautiful little town of to-day, with its cheerful, cozy residences, was long the foremost city of Contra Costa. Ten years after it got a start there were quite a number of flourishing business houses there and schools attended by 358 children. About this time the most important discoveries of coal mines in the Contra Costa hills were made. A number of splendid veins were opened and have been furnishing fuel ever since. Some of the coal mines in the Mount Diablo region are capable of an output of 150 tons per day, but they have not been worked to their full capacity recently, owing to the closing down

of a number of large factories, and the demand for coal being less.

Petroleum at various places was also discovered in Contra Costa county, but although parties spent thousands of dollars in the development of the wells, the oil was never found in quantities to pay for the trouble and expense. There is, however, a possibility that in the near future the oil industry will be developed in this county. A well is being sunk near La Fayette for that purpose. It is now down over 200 feet and yields a considerable amount of paraffine oil. Gas constantly is liberated by the bore, and the well borers estimate that sufficient escapes to illuminate a small house.

The county's railroad facilities have heretofore been limited to the Southern Pacific main line, running along its eastern and northern borders, and the Livermore branch through Alameda county, leaving its rich interior a long distance from railroad communication. This has been one of the great drawbacks to the development of the county, but the Southern Pacific Railroad has this year built a branch road through the Ygnacio and San Ramon valleys, giving better accommodations and shipping facilities to the farmers and residents.

Fifty-five acres of valuable water front near Martinez were sold recently, the supposition being that it was to be used by the Salt Lake and San Francisco Railroad. Surveys have been made through the county, and talk of a competing railroad is heard on every side. Such an enterprise would be of estimable benefit to Contra Costa county and to the State at large.

CALAVERAS COUNTY is one of the original twenty-seven subdivisions of California. The name Calaveras, signifying skulls, is said to have been given to the river so-called by one Gabriel Moraga, a famous early-day Indian fighter, on account of the great number of skulls which he found there, ghastly relics of a deadly battle between the Indians of the plains and those of the mountains over the salmon fisheries of the stream. As originally laid out this county included portions of what are now included within Tuolumne, Alpine and Amador counties. It owed its settlement in the first place to the flood of miners who, radiating from the central points of Sacramento and Stockton, followed up all the streams heading in the Sierra Nevada, prospecting their beds for the gold which they found in large quantities. One of the richest of these streams was Dry creek, and in the region drained by it quickly sprang up the settlements of Amador, Sutter and Volcano, which under subsequent quartz development sustained themselves as flourishing towns, and the first two of which are to this day thrifty and prosperous. Mining was commenced at Volcano in the same year that the discovery was made at Coloma, and in 1853 the town had a population of 5,000 and supported a newspaper.

Sutter Creek was incorporated in 1856 and still retains a good measure of prosperity, presenting a marked contrast to most of the old mining towns of the foothills. While Pleasant Valley was designated by the act forming Calaveras county as the seat of government, Jackson is the first place mentioned in local history as having enjoyed the honor, while the place originally selected is now only a memory. Jack-

son was founded in 1848 and was at first called Botellas, the name being subsequently changed to the one it now bears. Subsequently the county seat was removed to Mokelumne Hill, and in 1866 San Andreas carried off the prize, retaining it until the present day.

South of San Andreas or San Andres, as it should correctly be, Carson and Angels sprang into prominence at an early day. The first named place is little more than a memory now, although its mines have yielded large sums. Angels still holds its own, having a number of quartz mines that have paid steadily ever since their discovery. In 1864 the discovery of valuable silver lodes in the eastern part of the county led to the segregation of a large section on the eastern slope of the Sierra Nevada, which was erected into Alpine county.

Calaveras had within its borders, when first established, a number of places which attained large prominence and subsequently declined until little but their names remained. Among these was Yeomet, at the junction of the north and south forks of the Cosumnes; Muletown, Drytown, Fiddletown, etc. Among the places which maintain much of their former importance are Copperopolis, Murphys and Milton. In this county are some of the most productive mines in the State, and the mineral deposits are practically inexhaustible. The baser metals, copper, iron, cinnabar, etc., are found in abundance, and ledges of marble, limestone and granite, and undeveloped deposits of coal, are known to exist. Among the mineral deposits is a veritable mountain of paint, which for extent and variety of colors is probably unsurpassed in the world. In the east-

ern portion of the county is a vast timber belt of magnificent extent, which is comparatively untouched; live oak, sugar and nut pine predominate. Several most interesting natural wonders are also to be found there, among which are the world-renowned big trees, the great cave, with its magnificent chambers and wonderful stalactites, the natural bridge, etc. While the principal industry is mining, considerable attention is given to agriculture and fruit raising. Old mining ditches have been converted into irrigating canals, and in the mountains huge reservoirs have been constructed for the preservation of water. Calaveras is destined in time to attain large importance by reason of its horticultural and agricultural resources.

During the year 1892 Calaveras county held her own in the onward course of the State. The mines about Angel's camp are improving, which fact verifies the assertion that that town will become one of the most important mining camps in the State. Gravel mining about Central hill and Chile junction is reported improving, new companies having taken hold of them who will rush their progress and output for 1893; Mokelumne Hill also about the same as the past year, although considerable mining is being done thereabouts. Citrus fruits and nut culture is receiving attention.

ALPINE COUNTY was formed in March, 1864, out of those portions of El Dorado, Amador, Calaveras and Mono counties, lying near the summit of the Sierra Nevada Mountains, and the county seat established at Silver Mountain. The origin of the

necessity for this subdivision is peculiar to mining regions. In 1860 some scattering settlers were living at the end of the road leading southward from Genoa, Nevada, along the base of the Sierra. Late in the fall two or three Norwegians with burros passed that place and disappeared in the unknown region beyond. A few weeks later they emerged. The following spring they returned, frequently passing back and forth, adding others to their number, and soon they reported the discovery of rich silver mines at a place they called Silver Mountain. As the first few cabins constructed in the vicinity began to assume the proportions of a town it was christened, after a silver mine in Norway, Konigsberg, but afterward became known as the town of Silver Mountain. Prospectors flocked in and swarmed over the country. It was a part of the great Washoe excitement. Toll roads were constructed from various points "to the town of Konigsberg or Silver Mountain in the counties of El Dorado and Amador," to a point known as Silver Mountain in Mono county, as the records have it. It was not known for a time to what political division of the State this locality belonged. No one had to pay taxes, and every one was arbiter of his own rights.

Aside from the mining interests another industry of considerable magnitude had sprung into existence. Sawlogs, square timber, and cordwood were cut and floated down the Carson river to Empire, Nev., for use at the Virginia mines and mills. Over 175,000 cords of wood went down in a single "drive." But mining was the all-absorbing industry, and gave hope and promise of great prosperity. A history of the mining enterprises will tell how those hopes were

shattered, how chimerical those promises proved, and why so many decaying mills, deserted homes and abandoned towns lie scattered about the beautiful Alpine hills to-day. Abundance of ore was found which assayed well, and mills were erected for its reduction after the most approved plans for working the ores of the Comstock. But this ore could not be worked that way. It was not "free milling." Practical methods had yet to be learned. Then began experiments with new "processes"—costly, discouraging, disheartening processes! Silver mining was in its infancy. "Science creeps from point to point," and before success had been attained many companies failed.

In 1889-90 the first successful process for working the rebellious ores of this vicinity was introduced by Ottokar Hoffman at the Colorado No. 2 mine. Lewis Chalmers also had worked successfully the ores of the Morning Star by a similar process. These two mines were among the last to be worked, and could be paying dividends, but mismanagement caused them to be closed down. There are good mines in Alpine, although not a single stroke of work is being done in any of them to-day.

The natural advantages here are good. In the northern part of the county, embracing a portion of Carson valley, are some fine farms. Grain crops, vegetables and hay never fail. Many kinds of fruit thrive well. No finer apples are grown in the world. The atmosphere is dry and irrigation necessary, but water of the purest kind is in abundance and to spare. From the Blue lakes and other reservoirs water is supplied to mills, farms and towns of other counties. Many

bands of horses, cattle and sheep from other parts of the State and from Nevada are grazed and fattened here. There is not a practicing lawyer, doctor, incarcerated criminal or pauper in the county, and the Indians are peaceable, industrious and self-supporting. As a field for the sportsman and a place of healthful recreation for the invalid and those wishing to escape from business cares and the heated season of other localities, no better place can be found than Alpine county during July, August, September, October and November.

SAN MATEO COUNTY, adjacent to the little county of San Francisco on the north, completes the peninsula formed by the bay and the Pacific ocean. The county was not made at the original division, but was set apart in April of 1856. San Mateo was formed from what had been part of San Francisco county, and left the latter about room enough for the great metropolis.

Prior to the war with Mexico there were not over half a dozen settlers in what is now San Mateo, although some of these few had been there since 1835. Some had arrived earlier. Many immigrants came soon after the war opened. During the war one Francisco Sanchez raised quite a body of troops and fought the Americans at San Mateo with much success. When hostilities had ceased there were many people in the county, the first settlers occupying the western slope of the mountains. By 1852–3 the small village on the shore of the bay had begun to grow. For as much as three years after the organization of the county noth-

ing but the lumbering interests were of importance as an industry. During 1852 a belief spread that the lands would be declared Government property and the Mexican grants repudiated. Settlers rapidly took possession of everything under this notion, and much trouble ensued. These squatters subsequently either purchased their lands or abandoned their locations.

The lumbering interest of San Mateo first brought her into prominence, and for a long time was her chief industry. Her redwood forests were of great extent, and some of the trees rivaled the giant sequoias of Calaveras and Mariposa. In 1870 there was still standing, within twelve miles of Redwood City, a tree measuring seventy-five feet in circumference. There was also a hollow tree near Pescadero into which a horseman might easily ride, and in a hollow tree near Dearsville seven wood-choppers made their bunks and slept. Before 1840 the "whipsaw" came to San Mateo, and by 1847 large numbers of mills were in full blast.

Menlo Park is improving rapidly, that being the home of the great Leland Stanford Junior University. Two miles east of Menlo Park, in the Ravenswood district, the foundations are laid for the Theological Seminary which the Catholics are building. This will be one of the largest and most complete educational institutions on the coast, and the only one of its kind. It has a fund of $300,000 for building, besides a magnificent tract of land.

The increase of the assessment roll is a little less than $1,000,000 for the fiscal year, but if taken up to date the increase is estimated at over $2,000,000. Many of the large ranches that for years have hin-

dered the settlement and development of the county are being subdivided and sold in small tracts. Especially is this so adjoining Redwood City, Menlo Park and San Mateo, where fruit orchards and cottages, as well as the more stately homes of the wealthy, are taking the place of cattle ranges. A feature of San Mateo county worthy of note is the splendid system of county roads. For years much money and careful attention have been bestowed on the roads, and during the year 1892 over $20,000 has been used for their improvement. The extension of the electric railroad into the north end of the county from San Francisco opens a splendid location for workmen's homes, and many have been built in the vicinity of Colma and Baden.

The South San Francisco Land and Improvement Company has just completed, about two miles from Baden station, at San Bruno point, an immense establishment for slaughtering stock, packing meats, and for the manufacture of oleomargarine. Here also a town of about six hundred population has sprung up. The expenditure by the company represents over $1,000,000.

ALAMEDA COUNTY was formed in 1853 from a portion of Santa Clara and Contra Costa counties, of which it had previously formed a part. The county-seat was established at New Haven, now called Alvarado. Then it went to San Leandro, and finally to Oakland, where it will always remain. The county contains 512,000 acres of land, divided almost equally between hill and valley. Twenty thousand

acres along the bay are overflowed by high tide. The soil of the county is exceedingly fertile, and the natural consequence is that every available acre is a garden spot, the residence sections being uniformly beautified with a luxuriance of flowers and semi-tropical foliage.

The earliest history of Alameda county is in the records of the explorations of the founders of the early California missions. These mission founders were the first whites to penetrate to the sites of Oakland, Alameda and other towns, covered at that time by a heavy growth of oaks and other trees. Don Pedro de Allerni, an emissary of the Catholic Church of Spain, seeking for suitable localities for missions, seems to have been the pioneer white explorer of Alameda. The real settlement began about 1820. Don Luis Maria Peralta, a native of Tubac, Sonora, in consideration of services rendered to the various old missions, was granted by Governor Don Pablo Vincento de Sola, a tract of land five leagues in extent, which embraced the present sites of Alameda and Oakland, reaching from San Leandro creek to the northern boundary of the county. Don Luis had a numerous family, and in 1842 he divided his estates equally between four sons. In a short time American settlers began to flock in, and when a few years had witnessed the victory of the United States over Mexico, the accession of California to the Union, and the consequent overthrow of Mexican rule, the Peraltas saw their possessions slip away, and the flag of the Anglo-American settlers floating over the homes that they had improved, and by 1854 Oakland had become a city.

The town of Alameda was laid out by Chipman and Anglinbaugh in 1852, and a number of landings for boats were constructed at the mouths of creeks. Alameda has progressed from the first, until now it is said to be the most beautiful town in the country. It has two railroads, which carry local passengers from end to end of the place free. Its cottages are neat and picturesque, and its sidewalks consist of miles and miles of white artificial stone, bordered by a selvage of ever green grass. Its water supply is ample in quantity and excellent in quality, and it is claimed to be a lovely bed-chamber for San Francisco business men, very many of whom own residences there. Clean, healthy and quiet, it affords a charming retreat to some thousands whose days are spent in San Francisco. It will not be many years before Oakland and Alameda will be under the same name and local government. Their interests are identical.

Oakland is a great city, and a beautiful and prosperous one. Being at the terminus of the overland lines of railroad, and several local lines, it may be styled a railroad city. It has a number of electric railways traversing the city in every direction, and running beyond the city limits to the best farming lands in the county. Probably the best constructed electric railroad this side of the Rockies is the one just completed by the Southern Pacific Company, and now in operation. It commences at First and Broadway, and goes out Telegraph avenue direct to the State University grounds. There are also two branches to the road, which will cut into Lorin and other small towns. The Meetz horse car line to Alameda is now being turned into an electric road.

The assessed value of the property in Alameda county in 1891 was $83,350,822, and in 1892 had increased to $89,371,681, or over $6,000,000. The tax levy in the county has been quite moderate when compared with some of the counties in the State. In 1890 the State and county tax inside cities and towns was $1.00, and outside $1.30; in 1891 it was eighty-five cents inside and $1.15 outside, and in 1892 it was eighty cents inside and $1.10 outside. The county is run on a cash basis, all claims being paid in warrants, which are immediately cashed.

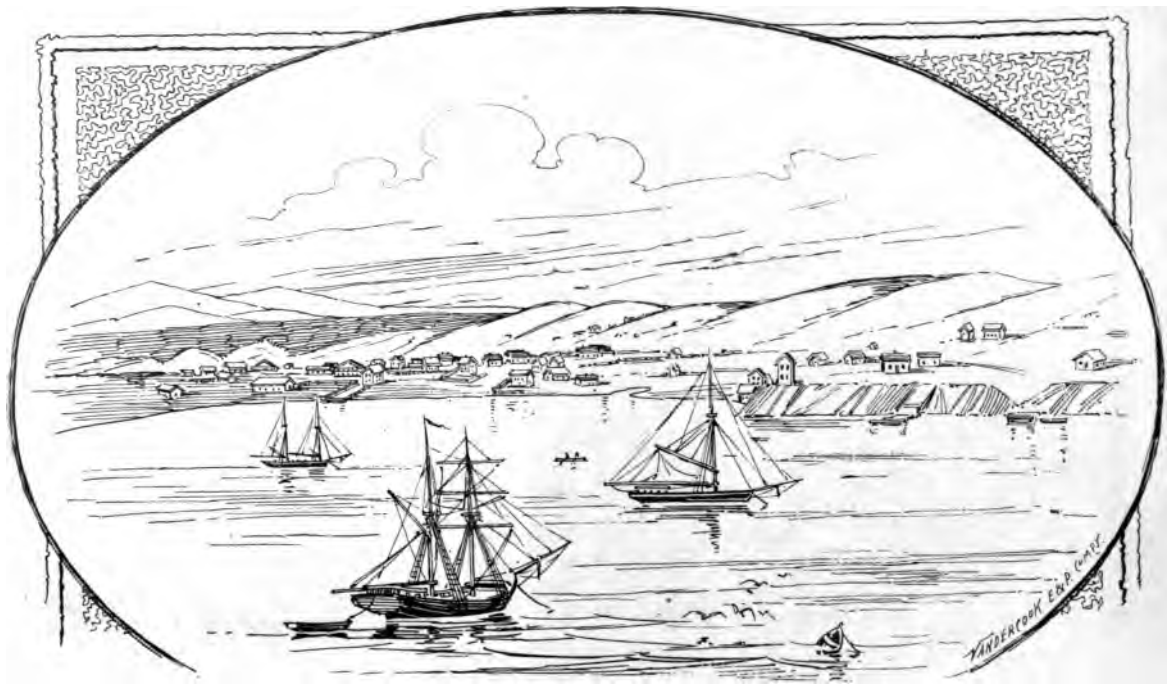
The University of California, situated at Berkeley, founded and located in 1868, is a monument to its own achievements. The school, broad and liberal in its principles, ably appointed in every department, romantically situated under the shadows of the Berkeley hills, embowered in characteristic California loveliness, tells its own story. Its merit as one of the foremost institutes of learning is unquestioned.

The public schools in Oakland and Alameda county never were in a more flourishing condition than at the present time. Recently the people of Oakland voted bonds in the sum of $400,000 for the purpose of building new school-houses. The issue runs for twenty years, and the bonds bear interest at the rate of four per cent. per annum. They were purchased by Arthur D. Thomson, president of the First National Bank of Oakland, who paid cash for them and a premium of $8,844. The construction of the new school-houses in Oakland has been commenced. The new high school building, which will cost $165,000, will be located on the block bounded by Eleventh, Twelfth, Jefferson and Grove streets. The new grammar schools will be

located in East Oakland, third ward and sixth ward, and large additions will be made to some of the present school-houses. In the country many new school-houses have been built during the past year. At Livermore, a union high school is being constructed at a cost of $11,000; another at Centerville at a cost of $12,500, and a third at Haywards at a cost of $5,500. Berkeley has increased its school facilities by two new school-houses, and a fine school building was recently completed in Bay district. The Piedmont district also has a fine new school building.

The work of improving the Oakland harbor has progressed finely during the past year under the supervision of the United States engineers. The work of the tidal canal has progressed slowly, for the reason that much time was spent in dredging the estuary. An effort will be made by the citizens of Oakland to have the next Congress appropriate a sum sufficient to complete the improvement. Contracts have been let by a number of private citizens for the building of wharves along the water front, an improvement which has long been needed.

An important improvement now in progress is the construction of the boulevard around Lake Merritt. The people by a popular vote defeated a proposition to bond the city for $400,000 for a boulevard. The city council, however, decided to go ahead with the work that had been commenced, and has made an appropriation of $100,000 for the same. The boulevard will be paid for by a direct tax. Lake Merritt will be dredged and the boulevard will cut across the southeast corner of it, and thence northeasterly around the lake.



San Francisco in 1848.

SAN FRANCISCO CITY and county would furnish material for the most exciting history ever written. Its size and importance, compared with its age in years, is superior to that of any other city on the globe. Its progress has been identified with that of every other section of the State, and it is the pride of Californians, from San Diego to Del Norte, that they have helped to build it, and it is their metropolis.

The belief in the careful supervision of an overruling Providence, producing events and discoveries exactly when His subjects are prepared to utilize them, receives strong support from the history of the discovery of the entrance to the greatest and safest harbor in the world—the finding of the Golden Gate. To modern mariners the entrance to the magnificent bay of San Francisco is so capacious and well defined, and gives such unmistakable evidence of something of inestimable value beyond, to reward the greedy adventurer, that it is inexplicable to them how any one, sailing up or down the coast, could fail to have been attracted to it. History affirms that three different navigators of note passed Golden Gate unnoticed as far back as the sixteenth century. Sir Francis Drake was on the coast in July, 1579, and remained long enough to give his name to a small body of water on the Marin county coast. Vizcaino was on the coast in 1596, and again in 1602, and on the latter voyage discovered San Diego harbor, and the bay of Monterey, but saw nothing of the larger and more desirable bay of San Francisco. His last expedition had been fitted out by Count Monterey, and was intended as one of exploration, and to find and lay claim to everything valuable along the whole coast.

Still the bay of San Francisco remained undiscovered, in spite of the fact that Drake had spread glowing accounts of California and its wealth of gold and pearls. In Spain, dozens of small expeditions, whose object was to come here, failed utterly. Spain and England were both jealous of any territory that the other might acquire, but Spain did much more to become established in the new El Dorado than any other country. The discovery was finally accomplished by accident. The "beautiful bay" of Monterey had been carefully described by Vizcaino as he had seen it more than 150 years before, and the mission fathers were bent on utilizing it. To that end an expedition was sent from San Diego in 1779 by land, to more thoroughly explore it, and discover all its advantages. Supplied with a fairly correct description, the expedition passed Monterey bay without recognizing it, and journeyed on to the hills over-looking the magnificent land-locked bay of San Francisco. For a time they were certain this was the bay of Monterey, but more thorough examination convinced them that it was not, and that they had found a valuable harbor hitherto undiscovered. A patron saint, Francis, was supposed to have led them there, and it was therefore called San Francisco bay. The discoverers returned to San Diego and reported their find. Singularly the mission of San Francisco was not founded until six years later. June 27, 1776, the missionaries with their paraphernalia started for San Francisco by land, and settled upon the northern extremity of the peninsula that forms the present county, establishing their presidio about where the Government army headquarters is to-day. A vessel laden with goods, cattle, horses, sheep, hogs and every-

thing thought to be necessary, was started for the new mission by water, but did not land until August 18th following. September 17th solemn possession was taken of the presidio amid imposing ceremonies. The harbor was explored, and it was found that it had only one opening to the Pacific. The mission was taken possession of formally in November, "when the want of an organ was supplied by discharging the muskets, and the lack of incense was atoned for by the smell of burnt powder," says a historian of the time. The mission was not established at the presidio, but further south, upon Mission creek, not far within the limits of the city of San Francisco, in that part still known as the Mission. It was not around these mission buildings that Yerba Buena, or San Francisco was built, but rather between the mission and the presidio, at the little cove of Yerba Buena, opposite Yerba Buena island, known now as Goat island. The name Yerba Buena, signifying "good herb," was given for a small shrub which flourished abundantly all over the peninsula and the bay islands.

Before 1835 the village of Yerba Buena was not in existence. The Mexican government had decided to build a little town on the site near the little cove some time before anything was done. General Figueroa, then governor, forbade any grants within a limit of 200 varas (about 185 yards) of the shore line, as he wished to hold the land for government purposes. Figueroa died before anything was done, and matters became mixed up. In 1835 Captain W. A. Richardson was appointed first harbor-master of San Francisco, or Yerba Buena at that time. The house was really a tent, made of a ship's foresail stretched upon four

upright posts. Ships from various parts of the world had come frequently to the bay before the house was built.

May, 1836, another citizen came to Yerba Buena to start a business in the little town. It was Jacob Primer Leese, and he decided that a location near the cove was the best to be had. The order of General Figueroa stood in his way, so he was obliged to go to Monterey and have Governor Don Mariano Chico direct that he be given his choice of locations. Leese took lumber back to Yerba Buena with him, and erected the second house in San Francisco near the corner of Clay and Dupont streets. The house was finished on the morning of July 4th. It was the first glorious Fourth in San Francisco, and Mr. Leese and Captain Richardson prepared for a grand celebration and housewarming. Several ships in the harbor loaned all their colored bunting, and with an American and Mexican flag, its decorations were very gay. Captain Richardson had invited everybody for miles around, an orchestra had been procured and some small cannon were borrowed from the presidio. Guests began to assemble in the afternoon, and sixty were soon in attendance. Many Sonoma people and all grandees of the Mexican and Mission governments who could get there came. Small tents were erected to provide comfort. Dinner was served at 5 o'clock, and then patriotic toasts were indulged in by everybody. After dinner a dance was held, and the fun was kept up at great length. Mr. Leese says: "Our Fourth ended on the evening of the 5th."

In a few days Leese landed his large stock of goods, and his guests were heavy purchasers. Leese married

a sister of General Vallejo very soon, and on April 15, 1838, Rosalie Leese, the first child born in San Francisco, blessed the union. That year Leese put two more buildings up; and the little town began to get started. In 1839 the village was surveyed. The limits were from Pacific street to Sacramento street one way, and from Dupont to Montgomery the other.

Up to 1844 Yerba Buena was a mere village of a dozen houses, and about fifty permanent residents. Up to 1811 its history is simply a record of the transactions of the Hudson Bay Fur Company. This company disposed of its interests in 1846 and moved away. By that year, in the summer, there were about two hundred people in the town and perhaps fifty houses had been erected. The growth of the place was very rapid after that period. By April of next year seventy-nine houses clustered about the cove. In five months of that year seventy-eight new edifices went up. Many of the houses were adobe, but some were mere shanties. The population had increased to five hundred.

At this time the alcalde of the place, Washington A. Bartlett, decided that the name Yerba Buena was hardly befitting for so pretentious a village, and he therefore styled the town San Francisco, and had an ordinance printed so fixing it. A newspaper published in the town, called the *California Star*, San Francisco's first journalistic venture, published a list of the inhabitants, in 1847. There were representatives from the United States, California, Mexico, Canada, Chile, England, France, Germany, Ireland, Scotland, Switzerland, Denmark, Malta, New Holland, New Zealand, Peru, Poland, Russia, Sweden, the West Indies and

the Hawaiian islands. Many of the foreigners were latterly from different parts of the United States.

The gold rush of 1848 soon brought a large and excited population to San Francisco. Lots had been sold in the town the year before, when the first water-front properties were disposed of. In the town fifty vara lots were sold for $12 apiece. In the spring of 1848 the first intelligence of gold discoveries reached San Francisco. Later a few miners came in and gold specimens arrived. People began to leave, singly and in crowds. Labor rose rapidly in value, business places were deserted, sailors left their ships, and everybody went wild. In the month of May one hundred and fifty people left San Francisco, and numbers departed daily. They all left everything behind in their hurry, and lost much of their property. By June the two papers that were being published in San Francisco were suspended because everyone connected with them—proprietors, editors and printers—had skipped out to the mines. Some of the many times millionaires of San Francisco then made their vast fortunes sure by becoming possessed of all the real estate they could carry.

In August, 1848, news was received of the end of the war with Mexico, and a grand celebration was held. Property began to be of great value, and lots jumped to big figures. While numbers of people went off to the mines hundreds of newcomers arrived. All who wished could get work, and wages ranged from $10 to $30 a day. The State's whole population began to flock to San Francisco for supplies, and everything was needed. There were no accommodations for them, so that houses had to be hastily constructed.

Lots went up to higher prices, buildings were started every day, and tents dotted the hillsides all over San Francisco's present site; everybody made money and was growing rich. Gambling saloons started everywhere—the whole country was afire with excitement. Thousands kept pouring in, the mines increased in wealth, and their gold came to San Francisco for more supplies. By the beginning of 1849 there were 2,000 people in San Francisco.

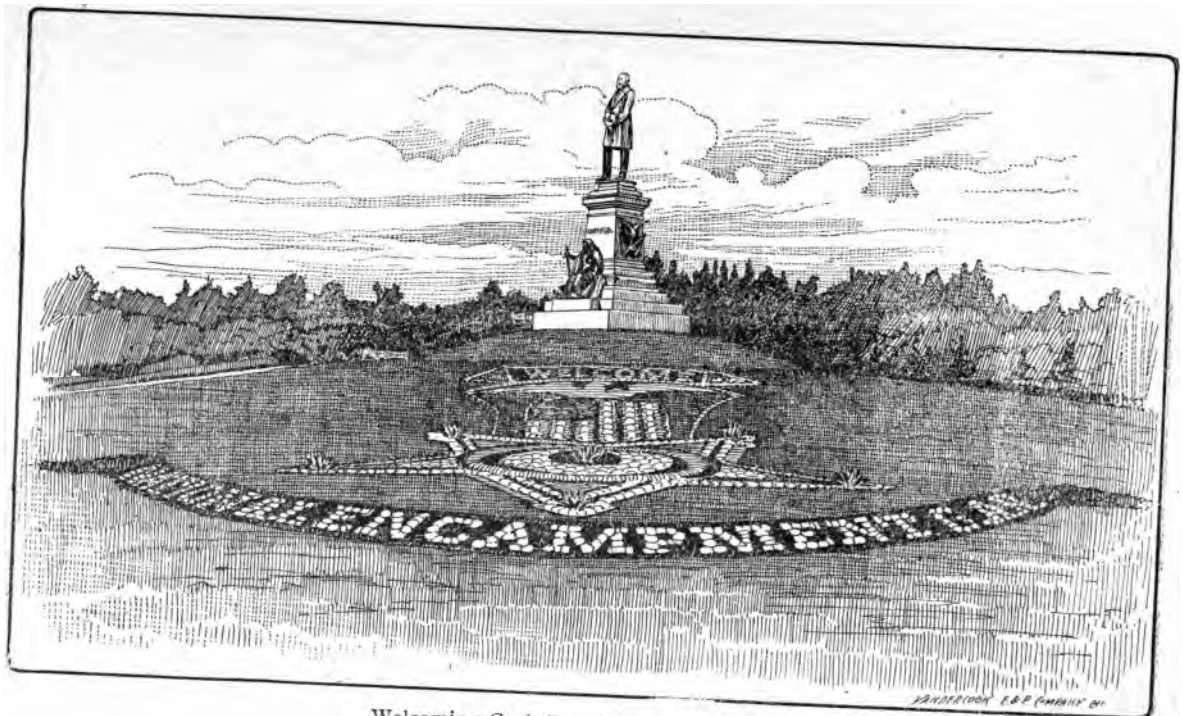
From this time on the history of San Francisco grew so fast that the transactions of any year would have furnished material for a large history. The sand dunes and sage brush disappeared rapidly. Grand improvements rushed on apace. There is no counterpart of the rapid growth of San Francisco except in marvelous Chicago, which began its forward movement almost to a day with the first receipt of gold from California.

Business ventures were conducted on a grand scale, and movements for the moral and intellectual betterment of citizens were equally pronounced. Schools and churches were established, and in several instances the houses of worship were constructed in the East, and sent around Cape Horn in the holds of sailing vessels. The business man had to have his morning paper with his breakfast, and the churchman perused with avidity the news supplied by his church organ. San Francisco had shaken off the censurable debris of mining communities, and adopted the healthy charms of cultured centers of Christian civilization.

As vast numbers of energetic men had come to San Francisco from south of the Ohio river, it is not surprising that their sympathies were with the people of

the seceding States after the fall of Sumter, nor that they hoped and believed that California might be added to the Southern Confederacy, of whose successful establishment very many of them never entertained a doubt. Their strength in numbers was so considerable that the loyal majority entertained grave misgivings as to the result should the conflict of arms be precipitated upon California. When the war was well under way, Governor John G. Downey, promoted to the position by the election of Governor Milton G. Latham to the United States Senate, had been elected lieutenant governor by Democratic votes, but was patriotically loyal to the Constitution of the United States. He authorized the enlistment of six regiments to be mustered into the service of the United States, and which number completely filled the quota of California under the calls of the President of the United States up to this time. These men relieved the regular soldiers still on duty on the Pacific coast and were assigned to active duty wherever soldiers were in demand in California, Arizona and New Mexico. The action of Governor Downey gave joy and encouragement to the loyal men of San Francisco, who hastened to enroll in the California contingent.

But there were a great number of the patriotic young men of San Francisco who were determined to participate in the stirring events transpiring in Virginia. As the Government seemed unlikely to order any of the forces organized in California to the Atlantic States, the historical California Hundred was formed. Captain J. Sewell Reed, a native of Massachusetts, conceived the idea of this immortal band, which was selected from several hundred young men



Welcoming G. A R., Golden Gate Park.

who offered, and who were not only expert horsemen, and accustomed to the use of fire-arms, but were all able to bear their own expenses to the seat of active hostilities. They were mustered into the United States' service by Colonel Ringgold, of the regular army. They represented by birth nearly every Northern State. When organized they were reviewed by the mayor of San Francisco, attended by the principal business men and citizens, and went to Starr King's Church in a body, where he consecrated them to the service of the country in as eloquent an address as he ever delivered.

As evidence of the earnest loyalty of all classes at that time, and their anxiety to be identified with the glorious cause of the Union, one incident is mentioned. Places where a company could practice, drill and become accustomed to military discipline were not as common then as now in San Francisco. There were no National Guard Barracks. David Fitzgibbon, a native of Ireland, long resident in San Francisco, was the lessee at a high rental of "Assembly Hall," located at the corner of Post and Kearney, where the "White House" emporium now is. His place was exactly adapted to the requirements of the men, the lower floor for a drill room, and the upper floors for sleeping quarters. He hunted up Captain Reed, and tendered its free use to his company. It was gladly accepted, and became the home of this gallant band until its departure by steamer for New York, and there their friends gave them their parting blessings.

Four more full companies organized immediately, and followed under command of Major C. Crowninshield. The California Hundred were first assigned to duty as Company A, Second Massachusetts Cavalry.

Captain Reed was killed while at the head of his command in a charge at Drainesville, Virginia, February 22, 1864, and how these five hundred Californians shared in the severest campaigns in Virginia is evidenced by the fact that only one hundred and eighty-three were mustered out at the close of the war, and a great number of these held rank as commissioned officers. Very many of them are among the most successful business men in San Francisco to-day, and all are specially honored. Col. C. Mason Kinne, the assistant secretary of the Liverpool and London and Globe Insurance Company, the pioneer company in San Francisco, was one of the members of the California Hundred.

When San Francisco began to put on the airs becoming a metropolis, there were several reasons why abodes and business houses displayed no great architectural beauty, nor any special magnificence in proportions. Lumber was $600 a thousand feet. There were evidences that earthquakes in the past had shaken adobe structures to pieces, and it was doubtful whether tall buildings, however massive their walls, could withstand the shock of even such tremblors as were not unusual in mining days. It required some courage to be first in constructing a tall house. One of the first great houses constructed in the business part of the city was the Halleck block, on Montgomery street, constructed for General H. W. Halleck, then a resident in San Francisco. That was followed by the Nevada Bank block, the Palace and Baldwin hotels, the Phelan block, and some others of good dimensions. No harm came to any of them, and then M. H. de Young was inspired to erect a "sky-scraper" as an imposing home for the San Francisco *Chronicle*, and very many timid

people pronounced it a risky thing to do, but those occupying the ninth and tenth stories seem to have no more nervous dread of a disaster from a quake than if they were domiciled in a one-story block of granite. The Crocker family and D. O. Mills, and the Mutual Life Insurance Company, of New York, and the Pacific Mutual Insurance Company, of San Francisco, have all since put up great piles which would be deemed spacious as well as ornamental in any city in the world. The wisdom of Mr. de Young has been endorsed by as careful business men as there are in the State, and his example followed to the extent of the expenditure of millions of dollars which would be utterly lost were their magnificent buildings wrecked by earthquake shock or otherwise. San Francisco has become the home of architectural ornaments, not alone in the business part of the city, but in all the residence districts.

San Francisco is better provided with internal railroad facilities than any city in this country, and probably in the world. Its numerous points of high altitude made the use of steam or horses for drawing cars impracticable. A resident solved the problem by the invention of the cable car, and the first one used in the United States was on the old Clay street line in San Francisco, and few improvements have been made in the original affair. Cable car lines were multiplied, until with the horse cars nearly every block in the city could be reached by one or the other of these conveyances. Now the more rapid electric car is taking the place of the others on some lines. By a system of transfers, not usual in other cities, one may go from one point to another, almost anywhere in the city, for one fare.

San Francisco has nearly always been remarkable for the extent and excellence of its manufacturing enterprises. It was so far from the established manufacturing centers when its history began that man's ingenuity and skill were taxed to their utmost extent to supply articles absolutely necessary in life's daily routine. Everything almost that was needed must be constructed here, and first came the manufacture of tools. In very many directions the skilled mechanics of the coast have no superiors anywhere. The Pacific Saw Manufacturing Company, of which Hon. N. W. Spaulding is at the head, has established a reputation for turning out reliable goods, both of all classes of saws and every kind of cutting tools not attained by any other manufactory of its kind in the United States. The Union Iron Works may be mentioned because of the remarkably fine work performed in shipbuilding. The United States war ships San Francisco and Charleston and the harbor defence Monitor Monterey will be monuments to the skill and ability of Irwin M. Scott, and the grand capacity of the Union Iron Works, as long as they remain afloat, and for years afterward. It would require pages to give even a brief mention of the manufactories in operation in San Francisco. These grand producers of wealth turned out of their workshops during 1892 articles to the value of over ninety-four millions of dollars—more than the value of all the merchandise which passed through the San Francisco custom house, both outgoing and incoming.

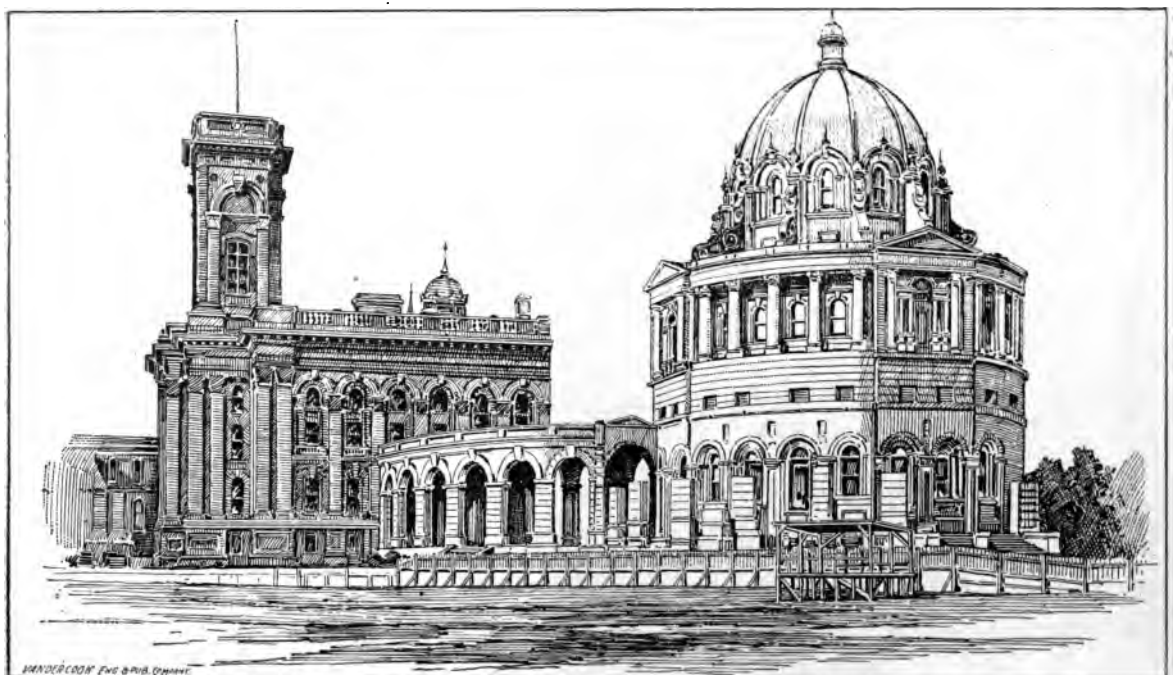
San Francisco has ninety-one school-houses of all grades, attended by 46,172 pupils, and expended in their support in 1892 $1,098,838. The fine climate of the city enables students to devote more time to study

without weariness than in climates which vary from hot to cold. The standard of scholarship in all grades is high in consequence, and the benefits conferred are in excess of those obtainable in the same time elsewhere. These figures are exclusive of the large attendance upon the great number of excellent and high grade private schools.

No community in the world has produced so many persons of wealth who took pleasure in devoting a goodly share of what they possessed to benefiting the people. There are now thirty-five kindergarten schools maintained in San Francisco, with an attendance of 3,108. The growth of the admirable system has been more marked here than in any other city in the country, owing to the personal interest and generosity of citizens. Eighteen of the thirty-five kindergartens are permanently endowed; fifteen of them are memorial kindergartens. The first kindergartens of the kind in the world were the Leland Stanford Jr. memorial kindergartens, the first one of which was organized July 7, 1884. Since that time, and growing out of that seed germ, there have been scores of them planted all over the world. With a pledge of only $7.50 per month, the work began, in the heart of the Barbary coast, thirteen years ago, under the auspices of Mrs. Cooper's bible class. At the close of the first year there were two kindergartens, with 109 children, and total receipts of $1,805.70. Last year the total receipts were $43,-731.90. During the thirteen years over 13,000 children have been trained. The late Senator Sharon gave fifty thousand dollars to found a playground in Golden Gate Park for the pleasure of the children of San Francisco. No point in this charming resort is patron-

ized to the same extent as this—not even the music stand where two days in the week the best performers dispense music for the million. The Park has numberless attractions bestowed by generous citizens, some of whom are with the dead, and all for the gratification and refinement of the public taste. James Lick created an institution which adds to the achievements of astronomy, and has already advanced the grand column of heavenly discoveries. Besides, he endowed the Academy of Sciences, and established a people's free bath house. Others have been equally generous, and the end is not yet. Royally have the citizens of San Francisco been endowed with wealth, and royally have they dispensed it for the improvement of humanity.

The gifts named have been for the intellectual gratification of the masses. The generous have not manifested less care for the comfort and welfare of those in want, or poorly provided for. The Salvation Army has been made the almoner of hundreds of business men and society women, who are proud to give, but lack the time to hunt up those requiring aid. Through this generosity a place is provided where supper, a bath, lodging and breakfast, are furnished for ten cents. A great number of persons buy tickets by the hundreds or the thousands and instead of giving money to those asking alms, they give a ticket guaranteeing the holder the meals, the bath and the bed. Mr. Brown, desirous of doing something to benefit working girls, has established a place on Howard street where they can obtain a cup of tea or coffee, and any single dish of good palatable well cooked food for one cent. Of course this does not pay first cost, but the girls get a healthy lunch, retain their self-respect, and



City Hall, San Francisco.

save pennies of which they have none too many. During January, 1893, an average of 140 girls per day were accommodated, and the deficiency which Mr. Brown had to make up out of his pocket was in the vicinity of $100 per month. More good could not possibly be accomplished for the same amount of money.

Facts similar to these might be recounted for hours. Only these will be given, and they are among the most unimportant. They indicate the tendency of the people to sympathize with and help one another. Very few of these acts of kindness are made public. No one suffers whose wants are generally known. The climate is not more genial and beneficent than the great hearts of San Francisco's people. They enjoy largely, and enjoy most when others are having a full share.

The necessity for improvements and additions to the harbor facilities of San Francisco has long been recognized by the business community and the harbor commissioners. The dock charges were not sufficient to warrant any material change. The harbor is a State institution, and the legislature, at its last session, upon the recommendation of the harbor commissioners, submitted an act, to be voted upon by all those entitled to the franchise, authorizing the commissioners to issue bonds, to the extent of $500,000, par value, the money received from their sale to be used in improving the docks, and erecting such buildings as were found to be necessary. The authorization was endorsed, and plans and specifications have been accepted for a grand union depot into which all the street railroads, cable and horse, will deliver passengers for the ferries, and gather all who may arrive for the various points in the city. It will prove a great convenience, compared with the

arrangements now in vogue. Other needed improvements are being consummated, and before the end of 1893 the landing at San Francisco will be one of the most sightly and convenient in the United States, and will relieve the business community of much unnecessary trouble.

SAN JOAQUIN COUNTY is one of the original subdivisions of the State, and the local seat of government was established at Stockton, where it has remained. The name of the county originated with the Spanish lieutenant, Moraga, who christened the little river of that name in honor of Joachim, the traditional father of the Virgin Mary. From that it passed to the great valley, and thence to the county formed from its upper end. The county is composed almost completely of level plain, what hills it contains occupying the southern end of it.

Jedediah S. Smith and other trappers were in the valley as early as 1825, but Father Crespi, of the Monterey Mission, had been there in 1773. Then the San Joaquin valley was full of deer, elk, wild horses, bear and fowls. As high as fifteen grizzlies have been seen there at one time. The rivers were full of fish, and many beavers, which the trappers were searching for, inhabited the banks of every stream. The trapping companies that came to the great valley in 1832 found the most populous villages of Indians that they had ever beheld. The banks of the rivers were fairly bristling with villages containing from 50 to 100 wickiups, built of poles and thatched with rushes. The Indians lived sumptuously upon game, fish, wild seeds and ber-

ries, while their huts were red with the salmon that they were curing.

Late in the summer of the next year, 1833, those villages were utterly depopulated. Here and there a half dozen Indians were left, but at every village the skulls and remains were numbered by hundreds. Evidences of wholesale burials and immense funerals pyres were seen everywhere. Only one camp had any considerable number left, and in one night twenty of these died. They were stricken with smallpox, which was a disease unknown to them before, and for which their medicine men possessed no specific. Every tribe of Indians in California had at that time its "sweathouse" at each village. These houses were pits in the ground, covered with a conical roof in which a small aperture was left for the escape of smoke. A small entrance admitted the Indians, and it was tightly closed after them. In these dens a fire would be built upon the floor, the passage being closed the Indians danced furiously until in a reeking perspiration, and then they would dash to a stream of water near by and plunge in. This heroic treatment of the fever patients doubtless killed every one who tried it.

Unlike other American Indians, these never used trees or bark with which to build their canoes. Instead they used tule reed strongly lashed with strips of willow These boats were serviceable and very buoyant. These Indians for many years after the whites came in believed that the Great Spirit was still on their side. One tradition was that upon the coming of the pale face the summer showers, which had been regular and frequent, were stopped by the Great Spirit, so that the sterility of the land would drive the white man away,

after which the rains would fall again. They never figured much on artesian wells and irrigation canals.

The first immigrant party that came through the San Joaquin valley was Captain J. B. Bartelson's company of about thirty men. They came across the plains, and after arriving in the San Joaquin valley separated and spread out over the State. A Captain Weber formed a partnership with Guillermo Gulnac in 1842, and started various industries. Because of the latter's Mexican name Weber applied for a land grant through him of eleven square leagues of land in the vicinity of French Camp, in what is now San Joaquin county. Soon after the partnership was dissolved, and Weber became the owner of the land. Weber visited Sutter's Fort and hunted up an Indian chief, Jose Jesus, with whom he formed a lasting friendship and peace. Jose advised Weber to start his settlement at the place which is now Stockton, and in accordance he located upon the site. Jose agreed not only to a peace, but to help fight any Mexicans or Indians who should give trouble. As Jose was the terror of the Mexicans this alliance did much to assure success to the young town. The settlement was commenced about 1843. The location was particularly advantageous, as the hunters and trappers made French Camp their winter quarters, and they exchanged ammunition and blankets for furs. The application for land that Gulnac had filed was allowed in January, 1844. Captain Fremont passed through there in March of that year. In 1847 Weber, who had given his attention to his business in San Jose, decided that his settlement at Stockton's site was progressing too slowly. He sold out at San Jose and moved with a number of men, 200 horses and 4,000

head of cattle, to the new settlement. The little town thus finally started was called Tuleburg. The name was changed to Stockton in 1843 by Captain Weber to honor Commodore Robert Stockton of the United States navy.

Early in 1848 news of the discovery of gold at Coloma came to the settlers on the San Joaquin. The fever struck every man in the county, and Captain Weber organized a company and started a search at once in his own part of the State. He found gold before long on the Mokelumne river, and soon the region known as the Southern mines was flooded with men. Weber left workers on the creek named for him, and taught a lot of Indians how to prospect. These he sent into Calaveras, and they faithfully hunted out the precious metal and sent in splendid specimens and glowing reports. A large party was equipped at Tuleburg and started for the new "diggings." The importance of the new mines grew with astonishing rapidity. Weber decided that a town was a necessity. He went back to Tuleburg and founded Stockton at once. He then bought a small sloop called the Maria for $4,000, and established the first regular packet line between San Francisco and Stockton. The town grew like a mushroom. Hotels went up rapidly in 1849.

Of recent years the notion that San Joaquin was fit only for a grazing county has been exploded. The county is rich now in agricultural productions. The lands which were too dry have been abundantly irrigated from the great rivers and from some of the finest artesian wells in the State. Hundreds of thousands of acres formerly relegated to the tules have been reclaimed, and have proved to be rich and productive.

The Stockton which started as a temporary camp so long ago is one of the most flourishing cities in the State. The whole county is prosperous and progressive, and the people are happy and contented.

No interior county in the State shows greater material progress for the year 1892 than San Joaquin. The building of the Tracy branch of the Southern Pacific Railroad has opened up a part of this county hitherto almost inaccessible during the rainy season. The opening of that line has had the effect that new railroads usually have of brightening up towns that had been slumbering for years. Tracy shows many signs of new and vigorous life. Its population has increased by half, its business has been doubled, and the village is dotted with new buildings.

Stockton now has a sewer system second to none, and it has been almost completed during the year. The main sewer and dumping station cost $35,000. The outlet pipe has been extended three miles to the San Joaquin river, and during the summer the sewerage is to be used in the irrigation of the Moss tract, which belongs to Sacramento Boggs of Colusa county. The pumps in the new station will handle the sewerage of a city of 100,000 inhabitants and have a capacity of pumping fourteen million gallons per day. Eighteen miles of lateral sewers have been laid at a cost of $44,000. The city has a separate system of rainwater sewers under construction, and during the year five miles of this sewer was laid at an approximate cost of $5,000.

MONO COUNTY was organizedin 1861, and is a long, narrow belt of territory on the eastern

slope of the Sierra Nevada mountains. Bridgeport is its county-seat. It was thought to contain rich deposits of silver, and gold placers of no great extent were worked for a time by the miners from Truckee and Virginia City. The Bodie excitement created towns and cities, but on its subsidence these were depopulated. However, little is now really known of the mineral resources of Mono county. Scarcely any of it is fit for agriculture, and it ought to have some appropriate place in the economy of nature, and when thoroughly explored may develop bonanzas. Traces of zinc, copper, iron, jasper, chalcedony, and other metals and stones have been found, and the county contains a great deal of valuable timber.

Mono lake is situated in the center of the county, and is about fifteen miles long by ten miles wide, its waters being a somewhat unusual compound, various chemical substances being found in solution in them. The great bluffs and rocky ravines of the Sierra come almost to the western shore of the lake, while upon the eastern side salt deposits and lines of driftwood mark the plain, showing very distinctly what were the former more extensive shores of this sheet of water. Upon the bluffs of the western side are water-marks which make it seem very probable that the waters were once almost a thousand feet above their present elevation, spreading out over the plains to the east to form a great inland sea. The lake receives a number of small streams, but is without a perceptible outlet. In picturesque variety and grandeur the scenery in the mountainous region of this county surpasses many of the celebrated views in the Alps.

SANTA CLARA COUNTY was one of the original subdivisions of the State, and contained more territory than now, as a portion was given to both Alameda and Contra Costa counties in fixing their boundaries. In January, 1777, Father Thomas de la Pena founded the Mission of Santa Clara, having come from San Diego for that purpose, and to spread the faith among the Indians. The name was chosen by Padre Thomas in honor of Saint Clara, child of the pious mother Hortalana, whose prayers were answered by a luminous glow, in token of which the child was christened Clara, signifying the feminine of light.

When the padres came to Santa Clara no other whites had ever seen the country. It was very beautiful then, as it still is. The natives were very numerous, and thousands were converted, forcibly as usual, in that same year, 1777. That was not the San Jose of to-day. The first site chosen was too near the river, which overflowed in the winter, to the extreme discomfort of the few residents. Subsequently they moved, having obtained permission from Spain, and that site was in the midst of the "Garden City" that this generation knows.

There was little or no interruption to the progress of the Santa Clara mission for many years. It was not long after it settled down to its calm routine before the hills about were overrun with horses, cattle and sheep. Many small industries were also started, in which the natives performed the labor after having been instructed. In 1812 a severe earthquake cracked the main building badly. Another shock in 1822 rendered it unsafe, and extensive repairs were necessary. Although Mexican independence had been

established, and the regime of the missions had been much altered, so that in fact they were soon upon the brink of destruction, still in 1825 a new site was selected and a new church erected. The original building has long since gone to decay and ruin. The prosperity of the Santa Clara mission was hardly second to any in the State. In 1823, even after some reverses, the mission had 22 400 calves to brand as increase to the herd. By 1825 there were over 74,200 head of cattle on their ranges, 407 yoke of oxen, 82,500 sheep, 1,890 horses broken to saddle, 4,230 brood mares, 725 mules and 1,000 hogs. Truly a rich possession. At that time there was 1,800 Indians at the mission. They attended to all of the vast labor necessary to keep it in operation.

The gold excitement which followed the declaration of peace left this country, like other non-mineral localities, deserted. However, in 1849 interest was revived in the neighborhood of San Jose. The constitutional convention which had convened at Monterey September 1, 1849, named that city as the State capital. December 15, 1849, the first legislature met in that city. There was not adequate room in the town for the gathering, and the two branches of the legislature had to meet in different houses. All of the elected Senators and Assemblymen did not appear, many remaining at the mines. The legislature had already convened when a bill was introduced to remove everything to Monterey. It was defeated. In April a splendid offer from General Vallejo, who wanted the capital at the town of Benicia, startled the San Jose people. A bitter rivalry broke out at once, and offers and counter offers were made as inducements. Members were

dissatisfied with San Jose, and in 1851 she lost the capital, which Benicia secured. In 1854 it looked as if San Jose would win again, as a supreme court decision gave her the capital. This decision was soon overruled, and Sacramento secured the prize for all time.

Santa Clara county is adapted to the production of all the fruits of the semi-tropics. There is not a variety which cannot be found here in abundance, yielding rich returns to the growers. So productive is the soil, so congenial is the climate, that new orchard homes are constantly being established, and grain farming is fast becoming unknown. Of prunes alone during the year 1892, there were produced in Santa Clara county 20,000,000 pounds, of which over 17,000,000 pounds went directly to the Eastern markets, the remainder supplying the local and San Francisco demand. Of other dried fruits over 5,000,000 pounds were shipped, while 15,656,675 pounds of green fruits were sent to the East and over 20,000,000 pounds used by the canneries and for local consumption. There were shipped by the Southern Pacific railroad 73,875,925 pounds of green and dried fruits and other ranch products. For the fruit the highest prices known for years was obtained.

One feature which distinguishes the year 1892 from others is that of the subdivision of large tracts of land into small orchard homes of ten and twenty acres. While there is proportionately more land devoted to fruit growing in this section than in any other county of the State, there are yet some large ranches; but the movement now under way bids fair to dispose of all of these.

STANISLAUS COUNTY was formed from Toulumne county in April, 1854. Its formation had been contested by the Terry faction under the belief that it would, in some way, aid the political fortunes of Senator Broderick, afterwards killed by David S. Terry. Empire City was at first the seat of local government, but later it passed to La Grange, a rival town. In 1860 the legislature annexed to Stanislaus a large slice from San Joaquin county, including Knight's Landing, a rapidly growing town, which obtained the honor from La Grange. In 1870 the Southern Pacific Company commenced work on its line through the San Joaquin valley, which it called the Visalia division. A new town was laid out on the road, the people of Paradise and Toulumne removing their houses bodily to the new place, which was called Modesto, and in 1871 this thriving place won the prize after a spirited contest, and soon became the most prosperous and thriving town in the county.

One of the first settlements in the county was that of French Bar or La Grange, as it soon came to be called. Rich mines were discovered here which were first worked by Frenchmen, whence the name. Several thousand people settled here, and the young city was both lively and prosperous. The years 1854 and 1855 were seasons of great excitement over the discovery of rich placers along the river at this point. Many foreigners settled here, and they were so strong that they for awhile successfully defied the law providing for the collection of a mining tax from foreigners. They were brought to their senses, however, by the authorities.

In the spring of 1849 Captain Knight pitched his tent on the bank of the Stanislaus river, in the edge

of the foothills, and established a ferry across that stream for the accommodation of the miners who were pouring into the mines. As Knight's Ferry the place became known, and it bears the name to the present time. Knight was a comrade of Fremont, and had accompanied him on his various exploring trips, finally settling here, where he remained until his death, which occurred in a few years. Captain John Dent succeeded Knight in the ownership of the Ferry and the place was frequently known as Dentville. It was a sister of Captain Dent whom General Grant married, and that individual, while a captain in the regular army, once spent some time here, in the summer of 1854, while en route to the post in the northern part of the State to which he had been appointed.

Hill's Ferry is another of the settlements of the early days which has survived the exigencies of the mining excitement and still remains as a center of considerable trade. This town was laid out on the Orestimba ranch, one of the five Spanish grants in Stanislaus county, and was for a long time the head of navigation on the San Joaquin river, though light draft vessels have gone considerably farther up the stream in times of high water.

Three branches of the Southern Pacific Railroad traverse the county, assuring the adequate transportation facilities that will be demanded when in the course of a few years the diversified products of a soil enriched by irrigation shall find their way in great volume to the markets of the world. Stanislaus is destined to loose her fame, as the banner wheat-producing county of the State, to attain in due time a new and greater fame as the richest, acre for acre, of the agricultural and horticultural counties.

Newman, on the west-side branch of the Southern Pacific Railroad, is another prospering town. During last year a sixteen-thousand-dollar hotel has been erected there, and the Odd Fellows recently dedicated an eight-thousand-dollar structure. Other buildings aggregating a cost of $10,000 have been built in Newman during the year.

Oakdale, on the branch railroad between Stockton and Merced, ranks second to Modesto in importance It is a beautiful lively town, in the center of a large district, destined to be famous for horticultural and agricultural productions. Public improvements aggregating many thousand dollars have been made during 1892, and the Oakdale canal and irrigation system has virtually been completed, promising new life and prosperity for the new and succeeding years.

The completion of the west-side branch of the Southern Pacific railroad has given existence to half a dozen new settlements along the line, and on the east side two new settlements have sprung up. The towns of Grayson, Knight's Ferry, La Grange, Crow's Landing, Turlock, Montpelier, Ceres, Waterford, the settlements of Westport, Horr's ranch, Hickman, Westley and others, have made progress during the year, and none have lost ground.

TOULUMNE COUNTY was organized by the first legislature, and Stewart, formerly Sonorian camp, was designated as the seat of government. Her earliest story began with the first mining settlement, as prior to that her only visitors were the few hunters and trappers who happened across her territory before

any Americans thought of making their homes on the Pacific coast. The Woods party, who came in the early summer of 1848, were Toulumne's first permanent occupants. They settled on the banks of a stream and named it Woods creek. These first comers discovered gold in paying quantities and decided to stay. Very soon afterward a party of Mexicans came to Toulumne and located the Sonorian camp, afterward called Stewart and then Sonorian. Gold being found everywhere and in large nuggets, a population, mixed and rough, poured in. Toulumne became suddenly the headquarters of the famous southern mines. Immigration became so rapid that there were soon more mining camps in this section than could be found in a like area anywhere in California. The richness of the diggings was unprecedented.

The towns that sprang up were generally named for their first settlers. Jamestown on Woods creek was named for Colonel James, who came from San Francisco in 1848. Jacksonville was thus named for Colonel Jackson, its first storekeeper. There was a town called Chinese Camp for its Mongolians. Yankee Hill was a nugget town settled by men from "way down East." Then there were Peppermint Gulch, Mountain Brow, Garotte, Big Oak Flat, Columbia, and a number of others with titles peculiar to mining nomenclature. Every camp was full of gold, and there was a preponderance of bad men and worse whisky. Toulumne was exceedingly rich, but the times were sadly out of joint in a moral sense.

The bitterness of feeling entertained by the Mexicans and Spanish for everything American, which had started with the war with Mexico, had not died out in

1849. Peruvians, Chileans, and all nations speaking the same tongue, combined in many things against the Yankees. Murders were of frequent occurrence. Germans, Austrians, French and Australians, called "Sidney ducks," grew disaffected. Questions of expelling all foreigners were fully discussed. Finally in 1850 a "foreign miner's tax" was passed by the legislature, imposing an impost of $20 a month on all foreign miners. The most intense excitement followed the first attempt to collect the tax. Riots were imminent everywhere. The foreigners combined and their orators inflamed them with speeches. The American miners assembled their forces and armed themselves. A body of several hundred formidable-looking miners marched into Sonora and almost proclaimed martial law. These, with the sheriff and the tax collector, started through the camps. Mexicans, Spanish, Dutch, French, everybody fled before them. Homes were dismantled, mines abandoned and towns depopulated. Hundreds of the foreigners went away from the country entirely. Others spread out over the county and commenced careers of outlawry that kept peaceful people in constant terror. Many robberies and murders were committed in revenge by these ostracised foreigners, and innocent people were frequently the victims.

The conditions of law and society rapidly improved in Toulumne after 1851. The mines were still pouring out immense treasures and the class of men who worked them were still very rough, but the courts were beginning to be well established; schools started everywhere, wise and energetic citizens came in, and a great variety of enterprises were inaugurated.

Toulumne's progress during the past year has been slow, but very substantial. There has been a general revival of interest in mining properties, which means prosperity and a general and direct benefit to the county and her people. Many mines are now being prospected and thoroughly examined by capitalists from abroad, with favorable outlook to speedy and more systematic working. The progress made in mining is necessarily slow, but still progressive, when the vast sums of money advanced in ascertaining and determining the character of mining properties are considered. As a notable instance of the progression in mining matters may be cited the Rawhide mine, situated seven miles west of Sonora, on the mother lode. On this mine during the past few months there has been erected a forty-stamp quartz mill, with all the necessary buildings for the proper handling of ores, causing the outlay of an enormous sum, which the character of the ore, and the excessive quantity fully justified. This mine being an approved success, greatly enhances the value of any adjoining claims, in which prominent men of San Francisco are interested, who are bound to realize handsomely on their properties by the progress and thorough development made on the Rawhide. Many mining properties abandoned because of mismanagement or lack of means to properly work them have been taken hold of by men of resources, and the spirit of progress is being exhibited to a degree not witnessed in these camps for many years. The situation of the mining interests the past year has been bright indeed; capital, energy and push are turning the wheel of fortune here, and a golden harvest is being garnered.

The Columbia Marble Works, which have been for

many years idle, were reopened last year, and the justly celebrated marble, some of which appears prominently in the construction of the Palace Hotel in San Francisco, is being removed from the extensive quarry in large quantities and shipped to the larger cities of the United States.

The people are interesting themselves to a greater extent than ever before in agricultural pursuits; Sonora now having a first-class flouring mill, which affords a market for the cereal produce, has given new life to the farming industry and more land than in any previous season is being brought under cultivation. That the people of this county are thriving, prospering and progressing is certainly an evident fact. The greatest sign of progress is improvement, and since last year the improvements are many and great, hence much progress. Many newly erected cottages throughout the county modestly speak of quiet prosperity.

MARIPOSA is another of the original subdivisions of the State, and it comprised, when formed, almost an entire third of California. The name is the Spanish for butterfly, and was bestowed upon the section by the great number of these insects of variegated colors seen there by the early settlers. In 1853 San Bernardino county was segregated, followed in 1855 by Merced county. The first county seat was Agua Fria, now depopulated and its place taken by the thriving town of Mariposa.

The region was first invaded by the miners in 1849, and one J. D. Savage established a trading-post there. General Fremont also settled there at an early date,

and began quartz mining on the famous Mariposa grant. As long as the mines paid well Mariposa was prosperous, and thriving towns sprang up in various sections. Among these were Hornitos, Bear Valley, Princeton, and a great number of others, of which only the names remain.

The principal fame of Mariposa county since the decadence of the mines is derived from the presence within her boundaries of that great natural wonder, the Yosemite Valley. This valley was first visited by white men in the spring of 1851, in pursuit of hostile Indians. In December, 1850, and January, 1851, the Indians went on the war path and murdered the whites wherever found. A small force of militia took the field against them and soon subdued all except a large party, which took refuge in the depths of the mountains in a valley said to be inaccessible by whites. But the volunteers followed them to their retreat, penetrated the Yosemite Valley and captured the hostiles. The members of the invading party were struck with the magnificent scenery of the valley and told of it on their return, but it was ten years or more before anything was done toward opening the valley or drawing public attention to it.

Mariposa, although formerly thought to be principally a mining county, has of late years shown a meritorious record as a fruit-producing region. The mild climate of the valleys and lower foot-hills renders it peculiarly adapted to the production of grapes, oranges, figs, peaches, apricots, prunes, olives and lemons, while the higher belts, with their mountainous soil and sharp frosts, produce apples and pears which command the highest prices paid in the city markets.

An experiment in raisin-growing, made by C. L. Mast, of Horseshoe Bend, proved to be an unqualified success. He packed a good yield of white Muscats and seedless Sultanas in 1892, which, for size and richness, are equal to those produced anywhere in California. Olive oil of a clear, beautiful quality has been manufactured in small quantities here for three years. Olive culture was at first deemed an uncertain experiment in this county, but it was found that the trees produced berries at an early age in these sheltered valleys. Oranges grown here are of a deep yellow color; sweet, juicy, and very fine-fibered.

No important steps toward disposing of the magnificent timber in this county have as yet been taken, but a railroad must soon pierce the valuable forests of sugar pine, cedar and yellow pine, which are not surpassed elsewhere in the State. A little work in the way of building dams for the storage of water has been undertaken in the last year, and unlimited benefit could be accomplished were more work in this line completed. The free wagon road from Mariposa to the Yosemite valley will undoubtedly be built during 1893. One or two other roads of importance will also be constructed this year.

Mining has received a little impetus during the past year. In the northwest portion of the county the Red Cloud and Southerland mines are working steadily and yielding handsome profits, while a number of smaller mines in the same neighborhood are paying well. Near Mariposa city only one mine of any importance is being worked, although many prospectors are making wages in the hills and gulches. The Alabama, owned by the Ward Brothers, is a valuable

mine, and the tunnel, in now about 1,000 feet, shows an abundance of good ore. Several fine veins of good marble have been discovered recently. Altogether the prospects of Mariposa appear really better and on a more substantial basis than for many years past.

SANTA CRUZ COUNTY was organized in 1850, and the county seat located at Santa Cruz. In 1770 Father Juniperro Serra founded the mission of Monterey. Twenty-two years after that the mission of Santa Cruz was established by Fathers Salazar and Lopez. The missions at Santa Clara, San Francisco and Monterey, being the nearest, contributed help and provisions to the new church. The Carmel mission sent seven mules, and the San Francisco mission five pair of oxen. Other missions sent what seemed appropriate. There were a great many Indians about the country, and thousands of converts were made. The cattle increased very rapidly until large herds roamed in the mountains roundabout. The Santa Cruz mission was very prosperous until about 1830, and a few years later when all of the work that the Catholics had done was destroyed by the Government. The Indians who were forced into the mission, and to adopt a different religion and habits, were like all other California natives, inasmuch as they resented the innovation upon their rights and liberties. In the year 1812 they lured Father Quintana out into the orchard one night and hanged him. They then returned the body to his bed, where it was soon found. The perpetrators were not discovered for many years and were not punished then.

Santa Cruz has never had any mining excitement

of her own. The first bituminous rock pavement in California was laid there, and from rock mined in her own quarries. The material was so good and abundant that it could be mined cheaply, and sold so low that that from other points had difficulty in competing with it. Large amounts have been used on San Francisco streets and side-walks and shipped to other points, even as far east as Denver. The supply seems to be unlimited.

The Watsonville beet sugar factory paid out $400,000 in 1892 for beets and wages, and the success of that enterprise is assured. The fruit interests of the county are prosperous, and more acres are being planted to fruits and vines. The leather, lime, wine and other industries are all successful. The State encampment of National Guards has heretofore been held at Santa Cruz, and this attracts great numbers of people. More are induced to visit the healthy city by the safe and pleasant surf bathing for which the place is noted. The little county is wealthy and promising.

MERCED COUNTY was formed from a part of Mariposa in 1855. Like nearly all the original subdivisions of the State, and all of the counties created since, the county seat question was not settled without contest. So many places in each subdivision look upon the county seat as little less desirable than a rich gold mine. The county takes its name from its principal river. Lieutenant Moraga, with a troop of Spanish soldiers, had been traveling over the arid plains until the tongues of men and animals were swollen, the eyesight blurred and the blood fevered.

They thought they had been doomed to death, when they came upon this little stream, which was hidden by the tules on its bank. It was hailed as a gift from a merciful God, and became Mercy or Merced river. The contest in Merced was settled by the selection of the town of Merced, where it is almost certain to remain.

Merced has been the home of great grain fields. It is now blessed with about the best irrigating system in the country, and has started in on the money-making plan of dividing up the large ranches, and inducing thrifty settlers to try their fortunes at fruit growing. Already the Crocker-Huffman Land and Water Company has three or four colonies well under way, and the grandest results are manifest. Merced being the nearest point to San Francisco where land with perpetual water rights is obtainable, the lands are being purchased for fruits. Figs, olives, oranges, lemons, apricots, peaches, pears, prunes, and indeed, all deciduous and citrus fruits grow here to perfection. When about ten times the profit can be obtained from an acre in fruit over an acre in wheat, it is not strange that the large ranches are being divided up. It is population in this country that produces the wealth, and the thrifty and industrious tiller of ten acres in fruit is as valuable to the community as the tiller of one hundred acres in grain. He is more so, because he is setting an example to those anxious for easy and comfortable lives.

MONTEREY COUNTY was one of the first described by metes and bounds by the legislature in 1850, and the county seat established

at Monterey, which had been the capital of Alta California, under the Mexican regime. The name is composed of two words, monte and rey, and literally translated means "king of the forest." The harbor and county were so named in honor of Count Monterey, who fitted out three small vessels, and put them in charge of Don Sebastian Vizcaino in 1599 with instructions to seize every point of interest and value on this coast in the name of Phillip III. of Spain. He visited various points, including San Diego, and on the 16th of December, 1602, sailed into the little harbor which he called Monterey, and cast anchor near the site of the present town. Vizcaino remained at Monterey until the 3d of the following January, when he sailed away. Then followed one hundred and sixty years of silence, during which time no record speaks of this region.

In 1773 a great zeal for missionary work was manifested among the Mexican Padres, and an earnest desire to civilize and Christianize the inhabitants of the regions north. Exploring and missionary parties were immediately fitted out, one going by land, and the other by sea. They arrived at San Diego nearly at the same time, and the first mission of California was founded on the 16th of July, 1769. But their zeal was too great to allow them to wait at the southernmost border of the promised land, and they soon started for the north. They had read of the discovery and naming of the bay Monterey by Vizcaino, and the long lost bay was their objective point. The expedition left San Diego July 14, 1769, and was composed of about eighty soldiers, several officers, fifteen Christian Indians and Fathers Crespi and

Gomez. It was late in September when they reached the bay they were in search of, but they did not know it. The only excuse that can be offered for their not being able to recognize it from Vizcaino's description is that he wrote from the standpoint of one entering the harbor, while they were looking upon the bay from an inland point. The party moved northward and did not stop until they reached the Golden Gate itself. They walked along the shores of the bay and surveyed it from the top of the neighboring hills, and being taken with the spot, it was named after St. Francis de Assisi. They soon marched south again and repassed the bay of Monterey without knowing it to be the one they were in search of, and thinking that the harbor described by Vizcaino might be by this time filled with sand, they proceeded to San Diego, where they arrived on the 24th of January, 1770.

In the same year another search party was fitted out. It was in two divisions, one to go by water and the other by land. This time they were successful, both reaching and recognizing the bay about the same time. On the 3d of June, 1770, they again took possession of it in the name of the king of Spain. On the same day Father Junipero began his mission by erecting a cross, hanging bells from a tree, and saying mass under the same venerable rock where Vizcaino's party celebrated it in 1602, one hundred and sixty-eight years before.

The missions were designed for the civilization and conversion of the Indians. The latter were instructed in the mysteries of religion (so far as they could comprehend them) and the arts of peace. The

instruction of the savages in agriculture and manufactures, as well as prayers and elementary education, was the padre's business. The Indians were at first very shy of the newcomers, but after a time they began to cluster around the fathers and finally their old habits and manners of living were thrown off, and they contented themselves with the quiet life and somewhat laborious duties of the missions. It must be remembered that the civilization of the California Indian was no easy task. He had lived without labor and existed for naught save his ease and pleasure. His chief delight was the satisfying of his appetite and the best portions of his life were spent in sleeping and dancing, while in the temperate California climate wild fruits and nuts, on which he lived, grew in great abundance. But the benefits of civilization gradually dawned upon the homeless savage, and he soon took to the new life with surprising whole-heartedness, and in a short time the mission of San Carlos de Monterey was in a flourishing condition.

On July 14, 1771, the mission of San Antonio was established about twelve miles south of Soledad, in Monterey county. The buildings were closed in a square 1,200 feet on each side and walled with adobes. The stream on the banks of which the mission was located was conducted in paved trenches twenty miles for the purpose of irrigation, and large crops rewarded the husbandry of the Indians and the padres. In 1822, this mission owned 52,800 head of cattle, 1,800 tame horses, 3,000 mares, 500 yoke of working oxen, 600 mules, 48,000 sheep and 1,000 swine. This mission on its secularization fell into the hands of an administrator

who neglected its farms, drove off its cattle and left the Indians to starve.

The mission of Soledad was founded October 9, 1791, and was exceedingly prosperous. In 1794, the mission of San Juan Bautista sprung into existence and did a great deal toward benefiting the poor savage. After all the good these holy fathers did they were destined to be driven, with their flocks, out of the homes they had founded and cherished. In 1813, by an act of the Spanish Cortez, and again in 1828, the extinction of the missions was ordered. In 1833, the Mexican Congress sanctioned the order, and in 1845 the overthrow of the missions was complete.

The mining interests have received undivided attention during the past year. Immense deposits of limestone have been opened on the California mountains. Gold and silver have been discovered in some of the canyons, and although gold is not found in paying quantities, a little research might develop results which would prove highly profitable. The Los Burros gold mines in the southwestern extremity of the county are rapidly coming into prominence, and alone will tend to prove that this county is not destitute of valuable mineral deposits. In Cholame valley, in the southern part of the county, mines of asphaltum, copper and gypsum have been opened, and petroleum in large quantities, while abundant deposits of black oxide of manganese have been discovered. Coal mines have been opened in several portions of the county, the most important of these being that of the Carmelo Land and Coal Company, whose mines and works are located at Carmelo, five miles south of Monterey and two miles from deep water on Carmel bay. The com-

pany, which is composed of San Francisco and local capitalists, have sunk two shafts of 800 and 500 feet depth respectively, built hoisting works with a capacity of sixty tons per hour, with coal bunkers and chutes, and are shipping a grade of coal equal to Wellington. The company is now preparing to run a 1,000-foot tunnel to crosscut a ledge of exceptionally good bituminous coal. With the completion of this tunnel, the output of the mine will be greatly increased. Deposits of bituminous rock have been discovered, and preparations are being made to handle the product of the extensive beds of that article, now greatly in demand for street paving.

An industry which gives promise of becoming far greater is that of shipping the pure white beach sand, which abounds in inexhaustible quantities near Monterey, to the glass factories of San Francisco. Carloads are shipped daily, and yet nature replenishes her stock quicker than the hand of man can diminish it.

Glancing back upon the changes wrought in the past twelve months, one will readily perceive that Monterey county has undergone a most radical change. The cities, towns, and county at large show a greater amount of improvement the past year than that which has characterized the preceding decade. New towns have risen where heretofore was but a barren waste; its cities have assumed metropolitan aspects, and what previously had been desolate mountain tracts, covered with well-nigh impenetrable timber and brush, are now cleared, and green fields and budding trees have taken the place of former desolation, while the tidy farm houses evince signs of prosperity and contentment.

SAN BENITO COUNTY was not organized until 1874, when it was carved out of Monterey, with 200,000 acres additional from Merced county some time later. It owes its existence to the policy of cutting up large grants or ranches, which acknowledged only one lord and master, and making out of them fit homes for hundreds of families.

The soil of San Benito county claims the honor of having sustained the first American flag of conquest ever unfurled to a California breeze. The facts on which this claim is based are as follows: In March, 1846, General Fremont arrived at San Juan, after a long and tedious march from the Missouri river westward. He had received the consent of General Castro, the Mexican governor, to halt there and rest his weary troops. But General Castro, for some reason, suddenly revoked his permission and ordered Fremont to leave the territory at once. The answer was returned that the American army must have time to lay in a stock of provisions and make other preparations, which would require some time, before leaving.

Castro at once organized a small band of mounted troops and proceeded to San Juan to drive out the audacious "pathfinder." Fremont heard of Castro's intentions and withdrew his army from the valley, taking up a position on Gabilan, or Fremont's peak, as it is often and more appropriately called, which overlooks the towns of Hollister and San Juan. Here he threw up fortifications, and, planting a flag-staff, defiantly raised the American flag in the latter part of March, 1846. Castro and his command manœuvred for some time at the foot of the mountain, but did not dare to attack Fremont's forces, which were safely

ensconced near the top of the peak. The Mexicans were armed with riatas and lances, and knowing that these weapons were inferior to those of the Americans, Castro finally concluded to withdraw his command.

After Castro's withdrawal Fremont broke camp and marched through Bear and Panoche valleys toward the San Joaquin, intending to march to the Oregon line. On his way he received intelligence that a state of war had been declared between the United States and Mexico, and immediately returned and was soon taking an active part in the conquest of California.

At that time the inhabitants belonged to the various Indian tribes, the hills were infested with grizzlies and the valleys were full of antelope and deer. The old mission of San Juan, which had been founded in 1797, was the only vanguard of the advancing civilization. The value of our fertile valleys and productive hills was then unknown, and a sleepy race in somnolent ease took without question what nature unaided furnished.

San Benito now has a population of about 8,000. Although one of the youngest, it is one of the most prosperous counties in the State. The soil is marvellously fertile, while the excellence of the climate is proverbial. San Benito county is virtually a new and undeveloped country as compared with many of the other counties of the State, and offers splendid inducements to home seekers.

FRESNO became a county by itself in 1856. It had theretofore been a part of Mariposa county. The earlier explorers and settlers in Fresno and the

San Joaquin valley began to arrive about 1844. David Kelsey settled in that year at French Camp with his wife and two children. He had a swivel gun that General Sutter had given him, and he used to fire it every night at sunset to frighten off any prowling Indians who might be near. In April of 1844 Fremont visited Fresno's territory in his march of exploration. In 1851 Coarse Gold gulch, in what is now Fresno county, was a prominent camp. In October, 1851, Coarse Gold was almost deserted, owing to a war which the Indians threatened. In the spring of next year many returned and business prospered. Settlers flocked in at a lively rate in the next few succeeding years and many small towns were started.

The final boundaries between Fresno and surrounding counties were not settled until 1873. The eastern boundary now is the main range of the Sierra Nevada mountains. At that place the Sierras reach their greatest altitude, culminating in Mount Whitney, the loftiest peak within the United States, not counting Alaska. On the west the boundary is in a spur of the coast range, in which mountains the famous New Idria quicksilver mine, one of the most valuable in the world, was discovered, in 1856.

Mining commenced in Fresno very soon after the great gold rush of 1849. Placer mining was engaged in extensively in what were called the Southern mines at an early date. Quartz mining for both gold and silver has brought in much money to miners all over Fresno. Coal and quicksilver also make valuable claims. Fresno counts considerably upon its natural wonders in several discoveries of fossil remains. Of the fossils, the remains of mammoths and whales are the most important.

Remains of one mammoth were unearthed by miners as early as 1858. There are several petrified trees of large proportions; one of which seems to bear evidence of having been cut down with a sharp-edged tool before turning to stone.

Irrigation has worked wonders for Fresno. Its average atmosphere was hot and dry, with occasional blistering winds in the summer time which were destructive to vegetation, and nearly so to life. These hot, dry seasons were exactly what was wanted for curing raisins most economically if the raisin grape could be produced, and a supply of water has solved that problem. The volume of water in Kings and San Joaquin rivers aggregated enough to thoroughly irrigate every arable acre in Fresno county, and with canals and ditches its application to the lands where and when needed was found practicable.

Then came the inauguration of the colony system. That was the wisest move made, and has added several thousand industrious and prosperous citizens to Fresno's population. There are still several hundred thousand acres to be subdivided, but the work will go on until the last large ranch has been swallowed up by numbers of small, well tilled vineyards and orchards.

INYO COUNTY was organized in 1865, with Independence as the county seat. It is a region of wonderful contrasts, of Arctic cold, and a heat that would paralyze almost anything that lives; of valleys of great fertility, and a sink so sterile that it has gained the title of Death's valley; of high mountains and a mysterious depression hundreds of feet below the level of the sea.

There are mines of gold, silver and lead being worked in Inyo, but they are not yielding large amounts. No one can safely predict what exploration may discover in the mountains surrounding Death's valley. There are three important industries which have been sufficiently developed to fix their immense value. The Inyo Development Company is manufacturing several thousand tons of soda annually by evaporating the water from Owen's lake. This is worth $33 per ton. The Saline Valley Borax Company produces fifty tons of borax monthly, worth $145 per ton. The supply is inexhaustible. The Inyo Marble Company is producing a marble which has no equal anywhere. A few samples would convince anyone with an eye to beauty in blending of colors of the futility of any artist trying to rival the Great Master in delicate and chaste work. The quarries turn out pure white, and every color that was ever seen on canvas or in nature. Great slabs can be obtained without speck or flaw, and it is so strong that it can be sawed into sheets as thin as pasteboard, and vases turned from it no thicker than fine porcelain.

Besides these mines of wealth which are being introduced to the attention of people on the coast and in the east, there are half a million acres of land in Owen's valley equal to the best in the State for the production of every kind of semitropic fruit. Inyo is not to be despised. Water can be turned into her fertile valleys and then she will take her place among the most prosperous communities in the State.

TULARE COUNTY was organized in 1854, from territory taken from Mariposa and the county seat established at Visalia. It is the sixth county in

size in the State. Her great fertile valleys are among the largest in this State of great things, and her mountains, which include Mount Whitney, rank among the highest in America. Her wheat fields are great; her irrigation canals are great; her herds of sheep and cattle are great; her products of fruits and vines are great, her lumbering interests are great, and she is great in everything but evidences of poverty and want.

The first settlement by the whites in the county is credited to Campbell, Pool & Co., who opened a ferry on King's river in the spring of 1852. Later in the same year N. Vice, a Texan bear-hunter, and one O'Neil, came to the present site of Visalia and laid out the town, which was named for Vice. There were hardly any but Indian inhabitants in the valleys and hills when Vice and his partner came. They must have done some advertising, for in less than a month there were sixty white inhabitants in the young town. The immense advantages of the county were made known and population poured in. Prosperous ranches were started everywhere in the hills. Other towns grew in various localities almost as fast as Visalia. Tulare never furnished any mining excitement to the State. It was her wonderful fertility that made her populous, and subsequently made her the largest grain-producing county in California, the land of immensity. The county contains 6,406 square miles of surface, or about 4,099,440 acres. Of this at least 2,000,000 acres are cultivable. There are about 20,000 acres of tule lands bordering upon Tulare lake. The balance of the land is mountainous. The foothill lands are of great value, as it is upon them that the citrus fruits thrive to the best advantage. The Sierra Nevada

mountains in Tulare average 10,000 to 12,000 feet in height. Lofty peaks and tremendously deep gorges make the mountains extremely rugged. Whitney, which overtops the rest, is 15,056 feet high. Researches of later years have developed minerals in great variety in Tulare. Some gold deposits exist up in the Kaweah region, but the approaches are so nearly inaccessible that the deposits are of little value. Other metals and minerals also exist, chief among which are iron, lead, copper, antimony, coal and fine marble.

The wonders accomplished in agriculture have contributed more than anything else to bring Tulare into prominence. The region north of Tulare lake probably shows the greatest development in large irrigation enterprises. A branch of Kaweah river, called Cross creek, furnishes a tremendous lot of water for this region, named Lucerne vale. Altogether there are seven canals in that portion, summing up 265 miles in length, and with an aggregate capacity of 1,300 cubic feet of water per second. Other irrigation districts, embracing thousands of acres, are established all over the county, and there is an abundance of water for them all. A large number of farms are irrigated by artesian wells. The first well was bored by the railroad company in 1870, at Tipton. They struck a good flow at 310 feet, and used the water to irrigate forty acres of trees. Some of the later wells are capable of irrigating several hundred acres. A few years ago the grain of hundreds of thousands of acres required greater facility of manipulation. It was a Tulare farmer who first applied steam contrivances successfully to grain fields. By his method the ground is plowed, harrowed and seeded by steam. Machines are kept

going night and day. About ninety acres is a good day's work. In harvesting, a steam traction engine runs the combined harvester and thresher over the fields, reaping easily 100 acres in a day, and depositing the sacked grain in its path. The winterless climate of Tulare long ago marked it as being simply perfection for stock-raising. Cattle, horses, sheep and hogs multiply rapidly there under the best conditions, and the herds are now very large.

Year by year the doubters as to the benefits to be derived from the use of surface water on any crop that it will pay to plant, are becoming converted to the belief that irrigation is a greater discovery than gold. The little streams of water not only wet the soil, but they carry to the millions of rootlets exactly the elements they require to produce a vigorous growth and an abundant fruitage. Tulareans are observant, and a fact as prominent as this has become apparent on every character of soil, and for every kind of fruit, vine and cereal, has converted them to water users—confirmed irrigationists. This being the case, many hundreds of miles of new canals and distributing ditches were built during the year 1892, and tens of thousands of acres of land hitherto dry have been brought under irrigation. Among other ventures of the kind that of the Tulare irrigation district stands foremost. A new system of works, whereby 50,000 acres will be supplied with water, has been completed at a cost of $500,000, and it will result in more than doubling the ordinary product of those acres the coming year. Other enterprises of the kind are under way, notably at Tipton and on Lower Tule river. Alta district, in the northern portion of the county, has

added largely to its already extensive area of irrigated land, and Kern and Tulare districts, at the southern extremity of the county, seem to be getting into shape to commence another large system of works at an early day. Many, and in fact most all private and corporate irrigation systems in the county, have also been enlarged and extended.

Tulare presents a peculiar chapter to the wonders of the State, wherein may be read a story of past ages in her great Tulare lake. This name was given to the body of water by early explorers from the Catholic mission and the subsequent hunters and trappers. Tulare signifies tules, and the county and city of Tulare were both named for the lake. This lake was formerly about thirty miles long, and covered one hundred square miles of surface. It has no outlet, the waters of the Tulare, King's and Kaweah rivers, with those of small streams, sinking and evaporating. In recent years much of this supply of water has been diverted for irrigation purposes. One canal alone, called the "76," takes away a stream one hundred feet wide and four feet deep. Evaporation has done much to reduce the size of the lake, and recently a small forest of trees, broken off and strewn about, were discovered on the lake's bottom. None of these are uprooted, but stand as stumps and snags in the shallow water which has protected them from decay. The variety seems to be willow, grown sometimes two feet thick, and doubtless of great age. The trees were probably about their present size when the water submerged them, as they would not live under a very considerable depth. Evidently Tulare Lake is not a body of water of very ancient origin. Fish have always been abundant in its

waters, perch and catfish being most plentiful. The lake is now very much smaller than formerly, and as the rivers that feed it are being turned into irrigation districts, it will be no long period before the rich body of land it covers will be in use for cultivation unless it is fed by a considerable number of springs at its bottom.

Tulare county has room for ten times her present population, and gladly welcomes immigration. Prices for lands rule much lower here than in the older sections of the State, where results of culture are better known.

SAN LUIS OBISPO COUNTY is one of the twenty-seven sub-divisions of the State made prior to its admission into the Union. It derived its name from the mission founded one hundred and twenty years ago in honor of the memory of Saint Luis, the Bishop of Toulouse. The history of the county is intimately bound up with that of the various mission establishments in California.

On June 3, 1770, was founded the mission and presidio of San Carlos Borromeo de Monterey. In accordance with previous orders Portola, as soon as a beginning was fairly made at Monterey, turned the government of the new establishments over to the padres, and sailed away in the San Antonio on the 9th of July. During the year 1770 little was done at Monterey owing to a lack of priests and soldiers. The eestablishment of the mission San Buenaventura had to be postponed on this account. In May, 1771, the San Antonio again anchored in the bay of Monterey,

having on board ten priests with all the necessary appurtenances for the establishment of the five new missions proposed, namely: San Buenaventura, San Gabriel, San Luis Obispo, San Antonio, Santa Clara and San Francisco. Domingo Juncosa and Jose Cavaller were appointed to superintend the founding of the San Luis Obispo mission. The natives became hostile about this time and the work of the missionaries was deterred for awhile. In the latter part of September re-enforcements arrived. In consequence of the recent outbreak six soldiers were added to the guard at San Gabriel, and the founding of a new mission was postponed. The next year the San Antonio brought orders to explore the bay of San Francisco, and fortify and found a mission there. Accordingly, with Crespi, twelve soldiers, a muleteer and an Indian, Fages started for San Francisco. The party returned in April without doing anything of importance.

During Fages' absence Serra had received messages detailing great destitution and sickness at San Diego. Relief was sent, but this so depleted his store that during May, June and July Fages kept the men at the presidio, and the people at the mission, alive on bear's meat. Fages and Serra decided to return to San Diego. The occasion seeming opportune, the president resolved on his way home to establish one of the new missions at Canada de los Osos. He therefore took with him Padre Caballer, the mission guard and the required vestments and utensils. A site called by the natives Tixlini was selected, half a league from the canyon, but within sight of it. On September 1, 1772, Junipero raised the Christian symbol, said mass, and

thus ushered in the mission of San Luis Obispo de Tolosa. Caballer was left to labor alone at first, with five soldiers and two Indians to work on the building. The natives were well disposed, recalling past kindness, and were willing to be taught the new religion and mode of living. They were ready to work, offered their children for baptism, and helped with their seeds to eke out the friar's scanty food supply. The mission prospered and grew wealthy. Fine buildings were erected, some of which are in good state of preservation to the present day, and a great number of converts were made.

Twenty-five years after the founding of the San Luis Obispo mission, or in July, 1797, the site for another mission in this county was chosen at a place called Los Posas by the Spaniards, and Vania by the natives. Here Padres Laserem and Sitar founded an establishment which, in honor of the Archangel Michael, was named San Miguel. This, too, grew rapidly, and there was soon a large number of Gentiles gathered here for purposes of conversion. Padre Horra was placed in charge, but for some reason gave dissatisfaction. Like the mission of San Luis Obispo the one at San Miguel went through the same history of prosperity and adversity, and when the American occupation occurred but few traces of its former grandeur remained. Of the buildings covering many acres of ground, only one now remains, while the front porch of the church building is actually the private possession of an individual whose property line reaches to the wall of the structure itself.

From the time of the admission of California down to about five years ago, the growth of San Luis Obispo

was slow. It was isolated and difficult of access, and population did not increase with any great speed. But with the advent of the railroad in 1887, this was changed, and since then great strides have been taken, particularly in the eastern part of the county. The county is one of the finest in the State, and embraces over 2,000,000 acres of fertile territory. It is almost as large as the State of Connecticut. San Luis Obispo has been deprived, by the caprice of chance, of direct railroad communication; she has been contemptuously condemned by the arrogance of ignorance as a "cow county." She has wilted and almost withered beneath the traditional lethargy of her silurian settlers; but, with the speedy completion of the Southern Pacific railroad, a radical change has already commenced—a resurrection is at hand. The gap between Elwood and Santa Margarita will soon be closed, and that will be the route taken by passengers east by way of New Orleans.

At San Luis Obispo, with only 3,000 inhabitants, there is over $1,000,000 lying on deposit in the three banks. Within the past year many notable improvements have been completed. A much needed system of sewerage has been laid down; a magnificent county bank has been built; a club, in its small way as luxurious as the Pacific Union, has been organized Chrome reduction works and an ice factory will shortly be in full blast, while numerous new buildings testify abundantly to a generous confidence in the future. Nor has progress stayed her hand at San Luis. Arroyo Grande, Niponee and Paso Robles, bear eloquent witness to the contrary. In Paso Robles upwards of a quarter of a million dollars has been

expended in private and municipal improvements since last Christmas. This town boasts a superb hotel, an elaborate bath-house, a street railway, and an ever-growing reputation for push and enterprise.

The taxable property of the county in 1884 was $6,000,000; to-day it is $20,000,000. The population in 1880 was 9,142. It is now more than 20,000. San Luis raises the biggest onions in the world, some of them weighing four pounds apiece. Her cabbages are Brobdignagian. Her pumkins might be converted into coaches without the fairy wand of Cinderella's god-mother. Her potatoes are simply monstrous; one of them would prove a meal for Garantua himself. She makes, moreover, the finest butter and cheese in California, but these, the industries of her infancy, will give place in her maturity to others more complex and remunerative. Prunes do especially well. One orchard this season has netted its fortunate owner $175 per acre. An eminent authority has pronounced the eastern slopes of the Coast range to be the special domain of the Sauterne grape. A walnut tree, carelessly planted in the garden of one of the city fathers, produced this year a crop that sold for $35, a most pertinent fact and almost incredible.

But San Luis Obispo prides herself upon more esthetic features than those just enumerated. If she appeals to the poor she appeals also to the rich. Her scenery is pastoral and charming. Her climate is salubrious, equable and delightful alike in summer and winter. At Pismo there is the best clam beach in the world, dear alike to the horseman and the gourmand, a broad ribbon of hard, dazzling sand more than twenty miles long, the finest road in the State. There are

trout in the brooks, quail and deer in the hills, and ducks upon the lakes. There is, in a word, profit for all and pleasure for all. To the farmer, the horticulturist, the invalid and the sportsman San Luis Obispo holds out her hand in cordial greeting. She courts investigation, she invites criticism, and she demands, first and last, recognition.

When the improvements at Port Harford are completed, she will possess an excellent harbor, destined to be the terminus of a transcontinental road. Her fisheries are most valuable and almost unexploited. Her mineral springs are famous the world over. Her soil, with proper cultivation, yields many and diverse treasures. She produces all the cereals and fruits of the temperate zone with a truly tropical exuberance. In her mountains are quicksilver, onyx unexcelled in the world, copper, coal, chrome, iron, granite, gold and silver. There are inexhaustible supplies of asphaltum and bitumen, and beneath these deposits are vast reservoirs of petroleum yet undeveloped.

KERN COUNTY was organized in 1866, from the territory originally assigned to Mariposo. It derives its name from the river discovered and named by Lieutenant Moraga years before. The fur traders trapped the beaver in the San Joaquin river and tributaries before the discovery of gold; but Captain C. H. Weber, the founder of Stockton, was the first permanent settler in the valley. The broad plains and beautiful rivers of this section had attracted many Mexican rancheros, who, with their fatted herds, enjoyed the greatest freedom. Later the mining inter

ests predominated; only for a short season, however, as the husbandman's plow no sooner turned the soil than the beautiful yield gladdened the hearts of the settlers, and in a few years the lowing herds gave way to hamlets and villages. These early settlers were good, old-fashioned people who cared very little for politics and the outside world, and stayed at home and tilled their farms, raised stock, made money, and were contented and happy.

The county seat of Kern, when first established, was fixed at Havilah, a town which owed its prominence to mining. In 1874 it was removed to Bakersfield, on the Southern Pacific railroad, and as that has been made a small city by the combined influence of the fruits and vines and the railroad, it will suffer no farther interference. Indeed the Southern Pacific Company has made the immense progress and prosperity of Kern county possible, as it has every one of the sections reached by its great number of branches.

In the early part of 1854 a party of emigrants on their way from Los Angeles discovered gold within the limits of what is now known as Kern county. The news of the finding of the precious metal spread rapidly throughout the State, but it was not till 1857 that the great rush, called the Kern river gold excitement, memorable throughout the State, as one of these periodical furors which in former years so peculiarly characterized California, was made. Soon the mountains swarmed with eager men searching for gold, and it was not long till other discoveries were made, and French Gulch, Spanish Gulch, Havilah, Keysville and other places of similar character and names were found to contain a considerable amount of the precious metal.

The placers which had been found in the gulches, and bars and flats along the river, were soon exhausted, and attention was turned to the source of the treasure and efforts made to discover it. Numerous small leads, and one large one were found near Keysville, and a quartz mill was erected in the vicinity in 1859. It was soon found that without large capital mining in this county was not profitable, and soon placer mining was entirely abandoned and quartz mining became the dominant interest. After being successfully worked for a number of years the inhabitants of the camps turned their attention toward agriculture. But of late years the discovery of better and more economical methods of working gold-bearing ores has led to a partial resumption of quartz mining, and there is good promise for the future.

In earlier times this section was only a cattle and sheep pasture. Later it was noted for its fine breed of horses, principally those raised by J. B. Haggin on his famous Rosedale farm. Now it is becoming celebrated for its fine fruits. Its peaches are among the best produced in the State. Five large and prosperous colonies have been established in the Kern delta, three of which have been more recently planted by the Kern County Land Company and are in a prosperous condition. The Deacon Brothers, from Indiana, are inducing colonists from their old neighborhood to settle near Bakersfield. Other colonies are being promoted. A majority of the residents of two of these colonies are English people, and they seem to be very contented in their new homes. Rosedale colony is the largest and has been improved to such an extent that it looks like a garden. Large vineyards have been

planted and will give their first good yield the coming season.

This valley, or what is called the Kern delta, is undoubtedly the coming garden spot of the San Joaquin valley. There is no kind of fruit that does not grow here to perfection, owing to the excellent climate and the peculiar formation of the soil. The irrigation system being owned and controlled by a company of a few persons, and under one management, it can be made to produce the best results. The cultivation of alfalfa is one of the main industries, and corn, Egyptian corn and beets grow and yield immensely. There are several fine orange orchards in the foothills of the Tehachapi range, the principal one being owned by General Beal on his famous Tejon ranch. Delano, Sumner and Tehachapi are all thriving towns, and altogether Kern county is proud of her present condition and has flattering prospects for the future. The shipments of wheat, fruit and other products of Kern county by the Pacific railroad from Bakersville for the year 1892 amounted to about $2,500,000 in value.

SANTA BARBARA COUNTY is one of the original sub-divisions of the State, with the town of Santa Barbara for the county seat. It is the most desirable residence locality in the State, and produces everything needed to make life agreeable. A single point is in evidence which should prove this. The mission fathers were renowned for selecting the loveliest and most fertile and healthy spots for their missionary abodes. San Buenaventura, Santa

Barbara, Lompoc, Purisima and Santa Ynez were at one time within the boundaries of Santa Barbara county.

The Santa Barbara mission was founded December 4, 1776. Antonio Paterna and Christoval Bramos were the first priests in charge. The first church was built not far from the present center of the town, near the old presidio walls. It was made of boulders laid in mortar. After the new church or present mission building was erected the old church was used as a school-house until it became unsafe. Here, under the most favorable circumstances, with a mild climate and a fertile soil, the mission grew in wealth and population. In 1802, Humboldt, who was visiting Mexico, examined the returns of the missions of Alta California, and expressed much astonishment at the amount of cattle and other stock which had accumulated in twenty years, especially as a large number of Indians had to be fed from the yearly production. In 1812 the mission fed 1,300 people, had 4,000 head of cattle, 8,000 sheep, 250 swine, 1,332 horses and 142 mules. The productions for the year were 3,853 bushels of wheat, 400 of corn, 126 of barley and 26 of beans.

In time a new church building was required, and the material from which it was constructed was a peculiar quality of soft sandstone, which was procured in great abundance from a neighboring canyon, and was easily split into the required shapes. Tools had to be made from old scrap iron obtained from the ships, and the wondering Indians were taught blacksmithing. There were at least two hundred Indians, representatives of forty different and hostile tribes, employed in breaking and arranging the stone. This fact alone proves that

Fathers Rapoli and Victoria, under whose direct charge the Indians worked, were men of far more than ordinary ability, for it required no small amount of skill to keep these members of hostile tribes on a harmonious basis.

The girls were gathered together, and taught to clothe themselves, and to card and spin and weave the fabrics from which their clothing was made. Fruit trees were planted, and a mill erected by a small stream, which, in itself an insignificant affair, was, nevertheless, to the Indians the work of some supernatural beings. The friars got along very well with the Indians until several of the chiefs began to revolt at the custom which was gradually being adopted of placing the young squaws in a kind of nunnery as soon as they became of age. This the chiefs of the different tribes objected to, and organized a band of hostile warriors, who attacked and attempted to demolish the mission; but the revolution was quelled in the bud and the hostiles put to flight.

The missions became so prosperous, and their landed interests so extensive, that several of the neighboring Spanish grandees looked with covetous eyes upon the property of the Franciscan friars. It was all right for the grandees to hold large landed estates themselves, but it went against their grain to see anyone else in possession of them. They accordingly proceeded to incense the Indians against the priests, charging despotism, robbery and tyranny. There used to be a yearly collection in Mexico amounting to $50,000 to help the missions, but this was now stopped. The friars knew not what to do. At last several of the Mexicans began claiming large portions of the mission property, and in a

short time all the missions of California were confiscated by the State. It was a foolish move on the part of the authorities. The Indians immediately ran wild and soon returned to their old haunts and modes of living, committing many crimes and robberies on the colonists, until they finally became so dangerous that the existence of the colony was for a time in danger. After a few years almost the entire possessions of the missions were in the hands of the Mexican farmers and cattle raisers.

So far the county of Santa Barbara was chiefly inhabited and controlled by wealthy Mexican ranchers, whose farms consisted of thousands of acres, most of which was unused. When it became known throughout the State that the great ranches were being broken up, and that the best of the land was obtainable, in some instances as low as twenty-five cents an acre, an immigration commenced that in a few months revolutionized the whole industrial and social condition of society. The newcomers opened a variety of industries. Wheat, which had been raised in small quantities and ground up into an inferior quality of flour, for home use, was now raised for export. At first those who engaged in this pursuit were discouraged, owing to there being no wharves from which it could be transferred to ships. As the rich and productive quality of the soil became known, wharves were projected, and the Santa Barbara wharf was constructed in the summer of 1868 by a company of citizens. Previous to this all freight was transferred from the ships, which lay a mile or two from shore, by means of surf boats, and was generally in a deplorable condition before it reached its destination. About this time atten-

tion was drawn to this locality as a delightful place for residence and health resort, and people commenced coming in from all parts of the country. A boom set in and soon modern Santa Barbara grew up in and about the ancient Spanish Pueblo. New settlements sprang up in the succeeding year in various directions, notably in the northern part of the county, where Lompoc, Santa Ynez and other places are among the centers of population.

The mining and shipment of bituminous rock and asphaltum in this county have assumed some considerable magnitude during the past year or two, and the output is constantly increasing. At Carpenteria thousands of dollars have been expended in erecting refining works, putting in switches, building houses, etc. for the workmen engaged in developing the asphaltum products.

Santa Barbara has always contended that she has a remarkably safe anchorage for large vessels, as well as ample wharfage room for the accommodation of deep sea ships. This has been illustrated in the fact that all British war-ships passing up and down the coast now make a regular practice of putting in here for provisions, meats, and supplies of various kinds, all of which goes to prove the availability of the harbor, which jealous outsiders term an "open roadstead" for the accommodation of deep-draft vessels. During a single week recently there have been three British men-of-war in the harbor, the Warsprite, Melpomene and Nymphe. The fact that the United States Government has made a permanent course in the channel of Santa Barbara for speed-testing the war vessels built on the coast is a point of local importance of which the citizens feel proud.

Hon. Elwood Cooper and others have rendered Santa Barbara noted for its fine olives, which had become an important part of the daily fare under the padre regime. Its walnuts, almonds, figs, oranges and lemons are not surpassed by those raised elsewhere in the State. When the Southern Pacific Company conveys all its thousands of Eastern passengers through Santa Barbara, not one in a thousand but will ask for a "stop-over" at that point, and not one but will leave it with regret, whether the season be what the almanacs say should be summer, fall, or winter, but of which changes no note is taken in equable Santa Barbara.

VENTURA COUNTY was segregated from the lower end of Santa Barbara in 1872, and San Buenaventura designated as the county seat. Up to 1860 very nearly all of what is now Ventura county was held by Mexicans in ranches of great extent, and there were but nine foreign families residing within its limits. This was due to the fact that its territory had been selected by favorites of the Mexican authorities because of the salubrity of the climate, the fertility of the soil and the natural beauty of the surroundings; and these favorites had obtained grants for just as large tracts as possible before the country came into the possession of the United States, and by the terms of the treaty with Mexico these grants had to be confirmed. Americans did not care to till and improve soil which they could not own, and notwithstanding all the great natural advantages, Ventura was avoided. But the time came when some of the Mexican ranchers

were induced to dispose of portions of their great but unproductive estates. The ranches Santa Paula, Saticoy, and Colonia or Santa Clara were divided and quickly found purchasers. New blood was introduced, and the era of progress and prosperity began for Ventura which has never had a check since.

San Buenaventura mission was founded March 31, 1782, by Junipero Serra, and was placed in charge of Fathers Bonito and Camban. The first mass was said in a shanty erected for the purpose near the southeastern corner of the old orchard of the present mission. The church was first erected near the same place, but, owing to a sudden rise of the Ventura river which washed the foundation away, had to be abandoned. A new church was soon erected on an elevation above any such danger, and palm and fruit trees were planted in great abundance. The building is still standing in the center of the city of Ventura, and is an object of great interest to all. Many of the most prominent buildings in the present town are on the ground once occupied as the garden of the mission. As in the case of all churches built subsequent to the great earthquake, which occurred in December, 1811, the walls are of extreme thickness, being nearly six feet at the base.

The first church was dedicated September 9, 1789. Four priests are interred within its walls. This mission, like many of the others, had great trouble with the Indians, many of the neighboring tribes being extremely warlike. Petty insurrections were numerous and frequent, but usually terminated in nothing serious. The habit of shutting up the Indian girls when they arrived at maturity was the cause of more

trouble than anything else. In 1834 there was quite an uprising and although at the beginning it looked as though the days of the mission were at an end, the fathers, with the aid of the Indians who remained true, succeeded in driving the hostile tribes off. The tile roof of the church was entirely destroyed by the severe earthquake of 1857, but was soon replaced by one of shingles.

Within the past year this county has made rapid progress in material wealth, and its population has increased twenty-eight per cent. It is the largest producer of beans of any county or section of the State. The value of its last season's output exceeded $1,000,000, and the barley crop approximated 700,000 centals. A great deal of the valley and foothill lands formerly devoted to the raising of cereals has been planted to fruits and walnut trees, and during the year 1892 several thousand acres have been set out to young orchards, the apricot and prune predominating. The brown-stone quarries have been worked more extensively the past season, and considerable progress has been made in developing the gypsum and asphalt deposits, which bid fair to become profitable industries.

The oil industry, which has its center at the rapidly growing town of Santa Paula, has doubled its proportions within the past twelve months, and the output of crude petroleum at that point alone exceeds 1,000 barrels per day. New wells and new territory have been developed, and the outlook for an extensive, permanent and profitable oil industry could not be better.

Within the past year an incorporated company has

obtained a franchise and the right of way to build an electric railroad between Ventura and the beautiful and far-famed Ojai valley, a distance of twelve miles. The track has been laid through and cars, which have arrived at the Southern Pacific depot, will be running over that part of the line very shortly. Huneme, New Jerusalem, Saticoy, Montalvo, and the new towns in the county, have all made progress in 1892, and promise better for the future.

LOS ANGELES COUNTY was organized by the first legislature in February, 1850. Its boundaries embraced considerable more territory than at present. Los Angeles city always has been the seat of justice. The county is now about one hundred and twenty miles long and seventy-two broad at its greatest measurement. There are about 3,000,000 acres of land in the county, much of which is wonderfully rich and productive.

The peublo of the Queen of Angels, as an abiding place for the mission soldiers, was founded September 4, 1781, the proclamation of its establishment having been issued by Felipe de Neve, governor of California, in August of that year. The site was upon the spot occupid formerly by the Indian village Yangna. "Nuestra Senora la Reyna de los Angeles"—Our Lady, the Queen of the Angels—was to be the fostering and protecting spirit, and her name was given to the pueblo. Twelve adult males and their families, comprising forty-six people, founded the place. History relates that one of the adults was a native of China. The houses, built of adobe, very small and roofed over with asphaltum

brought from near-by deposits, were faced upon three sides of a square, wherein was a public building. Los Angeles was in fact an outpost merely of San Gabriel mission, eight miles to the east, and founded ten years before, to which place the people went for their provisions and to witness the Sunday festivities.

History begins for Los Angeles county much back of the city or even the San Gabriel mission. The white explorers who first penetrated to California's wilds, and exploded the once existing theory that it was a vast island, were that band of intrepid Jesuits under Father Kino (more properly Kuhn) who reached the Gila and Colorado rivers and then traveled over the valleys and mountains to the southwest in the year 1700. By 1720 he and his coadjutors had established fifteen missions upon the peninsula of California, but forty-six years later the king of Spain removed them. In 1767 the Franciscan friars took their places, to be in turn displaced five years after by the Dominican friars.

The Indians whom the friars found, and for whose conversion and civilization they so earnestly labored, were an unusually fine tribe. They had forty villages, including settlements upon Santa Catalina and San Clemente islands. Civil war was never waged. Their villages contained from 500 to 1,500 huts. "Suanga" was the largest. These Indians have been called "Calhuillas," a name which is said to have attached to them through a blunder, as the word was used by them as a salutation and signifies "master." They enjoyed a very complete government. In their religion they had no belief in purgatory or hell, and worshiped one god, "Qua-o-ar," very reverently. Many

people question whether the modern innovation on their sound beliefs was a benefit. Local laws and customs among these people constrained each to behavior that might still be exemplary in many Christians. Unlike most California tribes, the men did a good deal of hunting and were very successful in slaying deer and smaller animals, which were very plentiful. Their funeral feasts and other ceremonials were very weird and solemn. In one of them a young eaglet, captured just before he could fly, was nurtured to maturity, and then, after a most impressive and mysterious adjuration to send only happiness and prosperity from the Great Spirit to the natives, the bird was killed, and its soul was thereby freed. The body was then burned upon the fire of the feast. A number of legends and traditions existed among these Indians that would have done credit to the proudest of the Latin race. One corresponds closely to the tale of Orpheus and Eurydice. Another relates that the Pleiades are seven beautiful Indian maidens who transformed themselves into stars because their husbands treated them shamefully and ate all of the rabbits they killed, instead of dividing with them. Fortunately this transformation business on the part of females is a lost art. One of the prettiest tales is that the moon is the mother of the Indian nation, having given birth to the first female child among them.

The mission San Gabriel was founded in the year 1771. The next mission built upon Los Angeles county's territory was that of San Juan Capistrano in 1776. This mission was particularly ambitious in the size and strength of its buildings, thirty years being required for the completion of the structure. Six

years later a terrible earthquake shattered some of the adobe dwellings, and thirty-six victims, priests and neophytes, were buried in the ruins.

In 1822 Mexico had become independent of Spain. The same priests at the mission took new oaths of allegiance and administered the new ones to the Indians. There was no apparent change of government at the missions beyond these oaths. The destruction of the missions was in progress from 1824 to 1836. The Indians were manumitted in 1824–26, and soon fell into degenerate ways. In 1834 order was restored by again placing the Indians under control of the padres. Soon after the authorities at Santa Ana took the "pious fund" from the missions, and then divided up the lands, promulgating laws for the government of towns thus established. The priesthoods were abolished. Soon a wholesale destruction of the vast herds of cattle that the missions owned was begun. Only the hides and tallow of the beasts were saved. Many white settlers took bands of young stock and thereby started herds of their own. At the mission buildings were unroofed, timbers burnt, orchards and vineyards torn up and despoiled; everything ruined. The Indians refused to cut down the vines, but Mexicans afterward did it. The natives went back to their tule huts and resumed their religion, which had never been really abandoned for a moment. Thus were any benefits that might have resulted to the aborigines swept aside, and the work of the mission fathers went for naught.

The honor of having been the first English speaking settler of Los Angeles county is claimed by W. Whittle and Joseph Chapman. Whittle produces an old Span-

ish document dated 1835, in which he claims to have been in the country twenty years—that is since 1815. There are now large numbers in the county who may claim the title of "pioneers," and they may well be proud of the progress which has accompanied their residence and recompensed their efforts.

Los Angeles city has made an even race with the country since the beginning of its growth, and during the last five years especially. The permanent residents have no just appreciation of the remarkable advance made. Absentees, returning, after five years abroad, can see it, and find it hard to realize that such wonderful progress could be made in so short a time. New faces are seen everywhere, and it is estimated that the increase in population since the taking of the census has been fully twenty per cent. An internal sewer system, costing $374,000, has been completed, and $395,000 voted to pay for an outfall sewer to the ocean. A municipal water system, to cost $526,000, is to be constructed. There is over $10,750,000 on deposit in the nineteen banks in Los Angeles, or about as much as there was during the boom, when money was not in great demand. The post-office receipts are about the same as they were in 1887, when people stood in line for hours to get their mail.

Los Angeles has twelve lines of railroad centering there. The Santa Fe Company has commenced work on a handsome depot, rendered necessary by growing business. There are one hundred miles of street railroad, mostly cable and electric, the cars carrying over 12,000,000 passengers in 1892. Much street improvement has taken place in a year, and there are now one hundred and five miles of graded road, all of it paved

or macadamized, and all the business streets are paved with bituminous rock or asphalt.

Coaches run to the most popular resorts, very many persons preferring the coach to the railroad car because of the advantage thus obtained of seeing the country. A coach conveys passengers through the great orchards and vineyards to Baldwin's Santa Anita ranch and Monrovia. Many go and go again, allured by the magnificent beauties along the route, not less than by the gorgeous hospitality of Mr. Lawrence, at the Hotel Oakwood, Arcadia.

The planting of fruit trees during the past year has been something to marvel at. There are now about 1,500,000 fruit trees growing in the county, and an immense area of orchard was planted this winter. Great profits have been made during the past year by our horticulturists in deciduous fruits—prunes, apricots, peaches, etc.—and these now rival the citrus varieties in popularity. This year Los Angeles county commenced the shipment of deciduous green fruits to the East on a commercial scale, forty car loads being forwarded from Pomona alone. This industry, which has hitherto been confined almost exclusively to northern California, promises soon to rival the orange business in importance. The introduction of a correct method of curing lemons, and the high prices received for the crop, have given a great impetus to that branch of horticulture.

Pasadena, which suffered much from the subsidence of the real estate boom, has taken a fresh start this year. Property is frequently changing hands and trade is active. Much building has been done and new land placed under cultivation. An outfall sewer

system has been completed, more water developed, and a large storage reservoir constructed. A manual training school and polytechnic institute of high grade has been opened.

Pomona has more than maintained its prestige as the leading "all around" horticultural center of the county. Shipments of fruit and profits have both been large. Pomona has become headquarters for the olive industry. A mill to crush the fruit has been built. The fruit crop of Pomona for 1892 was worth nearly $400,000, an amount which will be more than doubled two years hence. Five fruit dryers and a cannery have been running all the season. Two fine school buildings costing $16,000 and $20,000 are being built. A great electric light and power system, the supply being drawn from San Antonio canyon, thirteen miles distant, has recently been completed.

Whittier has made many solid improvements during the year, since an improved water supply was obtained. It is estimated that 35,000 trees were planted this year. A cannery, sorghum factory, broom factory and drying establishment have been hard at work. Many lemon trees are being planted.

Land owners throughout what is known as the "Los Nietos country"—Downey, Los Nietos, Norwalk, Compton, etc.—have been growing rich on their bountiful products of corn, butter, cheese, fruit, etc. From Rivera about seventy car loads of walnuts were shipped.

Along the coast great activity has prevailed. At Santa Monica the Southern Pacific has extended its track along the beach three miles to Santa Monica canyon, where the company is at work on its new

wharf, 4,600 feet long, the longest wharf in the world. This company has started in to make Santa Monica, and there is no doubt it will succeed. The Soldier's Home, built on the land donated for the purpose—worth several hundred thousand dollars—by Senator Jones of Nevada, and Colonel Baker of Los Angeles, has been much improved, and proposes to compete with the best orchards in the county.

Redondo has lengthened its wharf and built up a big business, being ahead of San Pedro in coastwise freight. A handsome casino has been built for the convenience of visitors, with which the resort has been crowded during the summer. San Pedro expects a big boom now that the government engineers have recommended that place as a site for the deep water harbor, to cost nearly $3,000,000. Long Beach is at work on a wharf 1,631 feet long, to cost $15,000. Santa Catalina island has become a most popular resort, having had as many as 2,000 visitors at a time during last summer.

SAN BERNARDINO COUNTY was formed in 1853, with the town of the same name as county seat. There was a small settlement of Spaniards on the Santa Ana river, about where the city of San Bernardino is situated. There were no Americans resident in that great territory when gold was discovered.

After Brigham Young and his followers located at Salt Lake he determined to get a foothold on the Pacific coast, preliminary to gaining possession of the whole land. To that end about three hundred men, women and children were sent to plant an outpost in the far-off land, and after numerous trials purchased a

tract of land from the Lugo family, who were in possession of the San Bernardino ranch, a Spanish grant of 46,000 acres, and at once set about making improvements. They laid out the town of San Bernardino on the plan of Salt Lake City, giving it broad streets lined with cottonwood trees and irrigating ditches. Fields of grain were planted, orchards and vineyards set out, and soon a thriving settlement was established in the heart of what had been until that time an immense cattle range. Attracted by the fame thus given to this section, many Gentiles now found their way here, and as their ideas and interests clashed with those of the pioneer settlers more or less trouble ensued, and for several years the valley was the scene of many broils and considerable bloodshed. Up to 1857, however, the Mormon element remained in the ascendant. But in that year came the famous Johnson mission of Utah, the first attempt made by the United States Government to bring Brigham Young and his fanatical followers to a realization of their duties toward the law. At the outset the Mormon prophet decided to resist the troops, and with this end in view he sent out hurried but peremptory orders for all the saints to return at once to the headquarters at Salt Lake, in order to present a solid front against the invading troops.

The bulk of the settlers at San Bernardino obeyed their orders, and then occurred the memorable event known to this day in the history of San Bernardino as the Mormon exodus. It was necessary for the faithful to dispose of their property in the quickest manner possible; and, as the number of sellers far exceeded those able or willing to buy, the most ruinous sacrifices were made. Houses, farms, orchards and vineyards

were sold for less than the traditional song, and in more than one instance they abandoned their all without receiving any recompense, and set out on the long and weary desert journey of nearly a thousand miles. Some few of the Mormons, with the memory of that fearful journey still fresh in their minds, and well content with their surroundings, paid no heed to the directions of their spiritual leader and concluded that they could worship God after the dictates of their own consciences fully as well in the San Bernardino valley as in Salt Lake, and so remained. They had never practiced polygamy, or at all events not in their present abiding place, and had little difficulty in affiliating and even intermarrying with the Gentiles, who now poured in from all quarters.

In 1859-60 gold was discovered in the stream heading in the mountain valley to the north of San Bernardino, and there was a repetition of the wild scenes of the early mining camps in California. Holcomb and Bear valley were the centers of great activity, and a crowd gathered there to whom law was a myth and their passions the controlling element. When the war broke out, the majority in this section were rebel sympathizers, and the minority holding minor sentiments were compelled to be on their guard. The sympathizers with the South had a regular organization in Holcomb valley, and several expeditions were sent out to join forces with the Confederacy. One of these was led by a preacher who was killed before he reached his destination. A small but determined organization of Union men was formed in the town of San Bernardino, and for some time the community was disturbed by the threats of the rebel sympathizers that they would cap-

ture and sack the place. The presence of some soldiers, and the determined attitude of the Union men, at the head of whom were George Lord, John Brown, Sr., William Heap and others, cowed the secession sympathizers, however, and no violence was attempted. With the close of hostilities, at the surrender, all feelings of bitterness engendered by the war died out, and all joined in the work of improving the splendid country in which they lived. The completion of the Southern Pacific railroad aided materially in the change, while the construction of vast irrigation enterprises, and the inauguration of many colony settlements completed the good work and wrought an entire revolution in the social structure.

In 1871 the settlement at Riverside was commenced, and from the humblest and most discouraging beginnings, has grown to a wealthy and prosperous community whose reputation is world-wide. In quick succession followed the Etiwanda, Ontario, Lugonia, Redlands and other similar settlements, while a perfect network of irrigating canals and railroads now covers the entire valley, and the horticultural products of San Bernardino county are now among the choicest in the State. In the higher development of irrigation and horticulture, San Bernardino leads the State, and she is the example held up for imitation by every locality which desires progress and prosperity.

A large share of this county is included within the limits of the Mojave and Colorado deserts, and here rich mines of gold, silver, copper and other minerals have been found, which have brought large wealth to their discoverers and owners.

New and extensive irrigation enterprises have been

organized, and in time no water will be permitted to go to waste. It is believed that when all is utilized, supplemented by what can be obtained from artesian wells, there will be no lands in the county which cannot be devoted to fruits and vines. The Southern Pacific and Santa Fe railroads have been the most pronounced benefactors to every section of this great county, preceding settlers to many points where there was fertile soil and a prospect that the vacant acres would be wanted for homes by immigrants.

During the year last past Ontario's car of progress attained a gratifying speed, bringing its 2,000 passengers to the point of general prosperity. In horticulture Ontario's advance has been most pronounced, 1,015 acres having been added to her fruit area in 1892, making the place second to Riverside in this point. Though but nine years old, Ontario's orange shipments will this season exceed 150 car loads. Several residences, costing from $5,000 to $12,000 each, have recently been completed. Among the industrial enterprises inaugurated in 1892 was a fruit canning and drying plant costing $25,000. The plant was successfully operated last season, canning 900 tons of deciduous fruit. Ontario is now expending $400,000 in making her water rights the best in the State.

One of the youngest and most vigorous settlements in the county, and which is making remarkable advance, is Chino. It is the seat of the beet sugar industry in southern California, which is proving of the highest industrial value to the community and the county in general. During the past year about 3,600 acres of virgin soil have been brought under a high state of cultivation for the first time. The sugar out-

put from the Chino Valley Beet Sugar factory was 7,903,541 pounds. During the coming season the factory will be enlarged and 5,000 acres planted to beets. There were also 147 acres of orchard trees planted, largely olives and prunes, making the present fruit acreage 611. A number of buildings have been completed during the year, including a $10,000 opera house and fine residences. The population of Chino is now about 1,500.

Other points in the county are advancing rapidly. At Banning, Beaumont, South Riverside, Highland, Etiwanda, Cucamonga, Rialto, and all other favorable fruit districts, the area being reclaimed and planted to fruits of all kinds, citrus and deciduous, according to adaptability, is very large. In the Yucalpe valley twenty-five acres were planted to cherries, and as many more to apples, these fruits developing finely in that region. Needles, on the desert, is booming from her mineral interests, a large number of prospects having been developed successfully in that vicinity. A new smelter is in process of construction there, which will have a tendency to further encourage mining interests. At other desert points new mines are being opened up, all creating commercial enterprise and increased prosperity. At no time since the boom has San Bernardino county evinced such decided prosperity as at the present.

ORANGE COUNTY was created from the southeasterly portion of Los Angeles county in March, 1889, with Santa Ana as the county seat. It was practically an orange orchard when established, and

very appropriately assumed the name of the golden fruit. It contains about 500,000 acres, almost all of which is under cultivation.

With the exception of the settlements at Anaheim and San Juan the history of Orange county dates from the latter part of the sixties. In 1868 W. H. Spargeon, who laid out and established Santa Ana, settled at what is now the corner of West and Fourth streets, where he erected a building and started a country store. His first important competitor was L. Gildmacher, one of the best established and most prosperous of Santa Ana's merchants.

Ten years later marks the advent of the Southern Pacific Railroad. During this interval the surrounding country was converted from a sheep pasture to orange groves, fruit orchards and vineyards. At the close of another decade the Southern California Railroad, a branch of the Atchison, Topeka & Santa Fe, had completed its line through the heart of the county, connecting Santa Ana with San Diego, San Bernardino and Los Angeles.

The residents of Orange are principally immigrants from the Eastern States and Canada. Its educational and religious advantages compare favorably with those of any portion of the State. Its citizens are enterprising and prosperous. By the completion of the Newport Railroad Santa Ana has extended her importance as the commercial center of the county. The most marked progress by the county was made during the past year in the increase of her acreage planted to trees and vineyards, and devoted to agriculture. The artesian belt lying west of Santa Ana and Anaheim, much of which at this time last year was a vast pasture field, is

subdivided into eighty acre ranches, upon each of which a comfortable cottage and necessary farm buildings have been erected, and corn and grain-fields are substituted for pasturing herds and jackrabbits.

Upon the peat lands south of Westminister an Eastern syndicate has planted acres of cellery and other vegetables which during January and February, 1893, they have been shipping to Eastern cities by the car load. In the vicinity of Garden Grove many acres of cabbage have been planted in the moist lands, and walnut groves grace the uplands. At Anaheim a corporation has been formed for the erection of a sugar beet factory, and sufficient acreage for the culture of beets has been secured to guarantee the successful establishment of the enterprise. At Santa Ana a committee is at work securing acreage, and making arrangements for the erection of a similar enterprise adjacent to the city.

In Santa Ana the most important improvement of the past year was the completion of water-works costing $60,000 by which pure artesian water is forced through ten miles of cast-iron mains to sixty-eight fire plugs distributed throughout the city and to most of the residences within the city limits. Anaheim, the second town in size in the county, was founded in 1857 by a German colony, and is the oldest colony settlement in the county. Westminister, Fairview, Newport, El Toro, El Modena, Yerba and San Juan are important towns and settlements, ranking in size in the order in which they are named. The latter is one of the oldest towns in the State, and is the site of the San Juan Capistrano mission, established in 1776. The most important seaside resorts are Newport Land-

ing, Laguna, Arch Beach, San Juan-by-the-sea and Anaheim Landing.

SAN DIEGO COUNTY was the first one set apart in the original subdivision of the State. That was in accordance with the exact fitness of things. In very many material particulars the great Architect of the Universe had stamped it first among the places to be inhabited and improved by man, and it will retain that precedence until time is no more. Then it is true that this portion of the North American coast was visited by explorers many years before the name of San Diego was given to any portion of it. But those visits were productive of no results from a historical standpoint, and it was not until the cowled pioneers reached the shores of that great bay to which had been given the name of St. James, or San Diego, that the history of California actually was commenced. It was in 1603 that Admiral Sebastian Vizcaino, of the Spanish royal squadron, discovered and named this excellent and commodious harbor and gave the news of its existence to his royal master. It is evident, however, that little importance was attached to the discovery, for it was not until 165 years later, or in 1768, that the King of Spain issued a decree ordering the exploration and settlement of the territory adjacent to the bay of San Diego. This momentous undertaking was intrusted to Jose Galvez, the Royal Commissioner of New Spain, and in order that success might be assured two expeditions were sent out, one by land, and the other by sea. This latter consisted of three vessels, the San Carlos, Principe and San Jose, while the land expedi-

tion was divided into two portions, one commanded by Fernando Moncada and the other by Governor Portola.

The vessels arrived first in the harbor of San Diego, one of them entering the bay on the 11th of April, and the other on the 1st of May, 1769, while the third was never heard of after leaving the port of departure. The first of the land parties reached the bay shore on May 14th, and the other on the 1st of July. The water forces had made no attempt at establishing a land settlement, but on the 16th of July, the land having been formally taken possession of in the name of the king of Spain, Father Junipero Serra began the foundation of a mission called after the bay, San Diego, thus commencing the first civilized settlement ever founded in Upper California. The point selected for the mission was on a hill overlooking the river in what is now known as Old Town, where was located an Indian village called Cosoy. A number of buildings were erected, but the newcomers, for some reason, found the natives hard to deal with, and in less than a month there was a pitched battle with them, in which four soldiers were wounded and a boy was killed. It is evident that the natives were of a decidedly different temperament from their descendants of to-day, for they kept up their annoyances to such a degree that five years later it was decided to remove the establishment to a point some five miles distant. A place was selected at the head of what is now known as Mission valley, and a site was chosen that commanded the surrounding territory, and promised to afford good vantage ground for defense against the hostiles.

It was in August, 1774, that the removal was made, and during the ensuing year several substantial build-

ings were commenced and much ground was prepared for planting. But in this new location no better success was met in dealing with the natives than in the old one. True, many were persuaded to assist in the work of building and preparing the land for cultivation, but it is evident there must have been a smoldering discontent at work all of the time, which took a year or more in coming to a head, but finally broke out with fearful violence. On the 5th of November, 1775, a large number of unconverted Indians, in company with a great portion of the neophytes, surprised the mission at night and made a desperate attack upon it. They set fire to the buildings, murdered their occupants, including the padre in charge of the place, and tortured to death the converts who refused to join them. Only five of the people in the mission escaped with their lives, and as over one thousand Indians were engaged in the attack, it seems remarkable that a single one should have survived the massacre. The military arm of the church stepped in at this juncture and the Indians received a punishment, the good effects of which were permanent. The following year the ruined buildings were replaced, and from that time on there was no further trouble of any moment, and the San Diego mission followed the usual fortune of those establishments, reaching a high stage of prosperity, only to be ruined by the decree of secularization enforced by the Mexican government.

After the mission was removed to the interior, the old buildings on the river bank were occupied by soldiers, and the presidio was established there. Down to 1825, with few exceptions, the entire civilized population of the place lived within the presidio inclosure, or so

close at hand that they were within the protection of its guns. The Indians were disposed to commit depredations whenever opportunity offered, and were only deterred by the strong arm of the military.

In 1835 the pueblo of San Diego was organized under the Mexican laws, but it was not until ten years later, or 1845, that the assignment of the lands to the municipality was made. A year later California passed under the control of the American government and the pueblo organization was still maintained, the title of eleven square leagues, or 32,000 acres of land being subsequently confirmed to the city by the United States courts.

When the war with Mexico came San Diego figured prominently in those historical times. The presidio had been abandoned in 1837, but the people erected earthworks and prepared to defend the place against the Americans in 1846. However, Commodore Stockton had no difficulty in entering the harbor and capturing the fort without the loss of a single man.

On December 2, 1846, General Kearney with his small force of troops reached Warner's pass, and at once took the trail for San Diego. Four days later they reached San Pasqual, where they were encountered by the Mexican forces under General Pico. Although largely outnumbered, the Americans, by making an unexpected attack before daylight on their enemies, succeeded after a hard fight in putting them to flight. Later in the day there was another skirmish which resulted as did the first, in the defeat of the Mexicans. Lieutenant Beale and Kit Carson managed to work their way through the country, which was alive with the enemy, and took word to Commodore

Stockton at San Diego. That officer dispatched a force of marines and sailors to reinforce Kearney, who made the rest of the journey to the bay in safety. At this time the town consisted of only a few adobe houses situated at the foot of a hill on a sand flat reaching from the head of San Diego bay nearly to False bay. There was no wharf, although a large amount of business was done in the shipment of hides and tallow in exchange for supplies of all kinds. San Diego was in fact the trading point for a vast extent of territory to the east, north and south.

The people who came here with the American occupation soon saw that if the town was to amount to anything a new and more accessible location must be chosen. Hence in March, 1850, a grant was made some distance to the southward of the old settlement for the establishment of what was to be known as New San Diego, and which is a portion of the present city.

In the boundaries as originally fixed by the legislature a considerable part of what is now in San Bernardino county was assigned to San Diego county. The first election was held on the 1st of April, 1850. There were only two precincts, and a total of 157 votes were cast, while the aggregate population as shown by the United States census of that year was 798, that of the city itself being 650.

When the Americans came in they found much of the best land of the county already granted to the Spanish pioneers. There were no less than thirty-six such grants, as follows: Agua Hedionda, Buena Vista, Cuca, Cuyamaca, El Cajon, Guajome, Guejito, Jamacha, Janal, Jamul, La Penasquitas, Montserrate, Mission

San Diego, National Rancho, Otay, Pauba, Pauma, Peninsula of San Diego, Rincon del Diablo, San Vicente, Santa Ysabel, Santa Rosa, Santa Maria, Santa Dieguito, San Jose del Valle, San Bernardino, San Marcos, San Jacinto, Nuevo, Santa Margarit y Los Flores, San Hacinto Viejo, Valley de San Felipe, Valley de San Jose and Temecule. The aggregate area of these grants is 784,783 acres, while the area of the whole county is 9,580,000 acres, of which a considerable proportion consists of the arid wastes of the Colorado desert, and which are likely to remain arid wastes but a short time. It has long been known that only water was needed to make these unsightly plains blooming and very lovely. The grounds about the Southern Pacific depots, where water was applied, produced wonderfully. About the close of 1892, one of the artesian wells being bored by the railroad authorities near Salton lake began to flow from an eight-inch pipe, and enough pure cool water to irrigate many acres of the desert. Should other artesian wells do as well the whole desert may be reclaimed, producing abundantly all the fruits of the tropics. This promises to be feasible, and if so San Diego will be not only one of the three largest, but much the richest county in America.

For many years after the capture of San Diego by Commodore Stockton, a force of troops was kept at that place, and at different times officers were in command who were destined to achieve subsequent fame, among them being General Heintzelman, Colonel Magruder, Captain Winder and others. The first Pacific railroad survey was made under the escort of a company of troops from San Diego, and among

other discoveries made by the party was the point where the waters of the Mojave river disappear on the desert.

It was not until 1851–52 that the turbulent Indians of San Diego received their final quietus. While the tribes that had come into most intimate relationship with the whites were disposed to be friendly, there were others in the interior and on the borders of the desert who lost no opportunity for showing their hostility, not stopping short of murder in so doing. In the latter part of 1851 an attack was made upon the little village of Agua Caliente and several Americans were killed, while a number of buildings were burned. It was learned that a white man named Bill Marshall, who was married to a squaw, had instigated the Indians to this outbreak and had been concerned as well in other affairs in which Americans had been robbed or murdered. They were captured and taken to San Diego for trial. A court-martial was organized. The proceedings were summary, as the proof was clear, and they were quickly found guilty and sentenced to be hanged on the following day. A few days after this four Indians, two of whom were village chiefs, were arrested and tried for complicity in the Agua Caliente affair. They also were convicted and sentenced to death, but the indignity of the gallows was exchanged for the more honorable death by shooting. The four were accordingly executed on Christmas morning, 1851, being shot by a detail of twenty soldiers while kneeling at the heads of their graves.

Antonio Garra, the leading chief of the interior tribes, a well-educated man and possessed of great influence, was also accused of taking a prominent part

in the Agua Caliente affair. He, too, was found guilty and was executed by being shot on January 11, 1852. His last words, as he stood by the side of his grave, were "Gentlemen, I ask your pardon for all my offenses and expect yours in return." Then he knelt and met his death like the brave man that he was. The execution of Garra completely cowed the Indians, and from that time to this, with the exception of some minor depredations, there has been no trouble with them.

The era of exceeding prosperity did not dawn for San Diego until the advent of the Santa Fe railroad. Several surveys had been previously made, and some of the most prominent railroad men in the United States were identified with some of the propositions for reaching San Diego bay with lines extending by connections to the Atlantic States, and notably Tom Scott of the Pennsylvania Company. By the efforts of San Diego citizens, supplemented with subsidies of lands of great value, the Santa Fe Company was induced to extend its branch, known as the Southern California Company, through San Diego city, establishing its terminus six miles beyond, at National city, at the head of San Diego bay. Then prosperity began, not alone for the bay region, but for all the country along its line to Los Angeles. The same experience was had which has attended the enterprising expenditures by the Southern Pacific Company on its numerous branches from Los Angeles county to Del Norte.

An additional impetus was given to the progressive tide setting in for every part of California by a cutting of rates from the Atlantic States to the Pacific coast. Many thousands of Eastern people took advantage of

the low fares and came, saw, and were conquered, and the era of booms was inaugurated. It was this that caused such a generous expenditure for timber to be used as stakes to mark off twenty-foot lots on the hills for miles surrounding the city of San Diego. Thousands of dollars were made by real estate men very frequently in a day, and none were wise enough to know that it was an experience that could not last. The reaction came, and not a few were wrecked; but, like all storms, it left the air filled with healthy ozone, and the gloomy forebodings of the winter of 1887–8 have not been realized. Those who abandoned the place in disgust at that time would not recognize city or country now. Every prediction of the boomers has been more than fulfilled, and none of the efforts expended for improvements have been wasted. Of course the railroad projects anticipated had to be suspended for a time; but the Cuyamaca line, short as it is, has accomplished wonders for the country adjoining the whole line to its temporary terminus at Lakeside, and the National City and Otay road has fostered the orchard interest until the smoke of its engines shadows the brilliant green of orange, lemon and olive trees along its entire route.

The boom builders of 1887 and 1888 made the city; the settlers of 1892 are making the county. For this reason, therefore, there is little to remark in the growth of the city. An opera house, one of the finest on the coast, completed and dedicated; a jail, just started and to be pushed to completion; one or two ware-houses and some stores and dwellings, with the power-house of the electric line, are about all the new buildings of the year.

Across the bay Coronado is moving in the direction of an electric line from the ferry to the hotel, and for a double paved street on either side of the track for the entire distance. The hotel pier has been extended into the ocean and the Coronado railroad has been started on its extension across the islands connecting north and south to the south side of the harbor entrance at the old whaling station.

The bay itself has passed a memorable year: The war vessels of several nations have dropped anchor inside, and for the first six months the vessels of Uncle Sam's squadron were in almost constant attendance. During the year the trouble with the Pacific Mail Steamship Co. has been partially won, so that now these steamers call in their coming and going. The first of Uncle Sam's money to be spent on the bay since the old San Diego river dike was built has been expended this year on the quarantine station and wharf on the La Plaza side of the bay. These have been begun, but will need an additional appropriation to finish.

The exports and imports of the bay have not been materially changed from last year, at least in the aggregate. The imports have been general merchandise, coal and cement from foreign ports and lumber from domestic ports. Exports have been of grain and general merchandise, mostly to Lower California and San Francisco.

The growth of the back country increases from year to year, and the material wealth in orchards, vineyards and improved ranches is much larger than at any previous time. In the planting of citrus trees the Chula Vista section leads. Here hundreds of acres have been set to oranges and lemons, while

many orchards previously planted are just coming into bearing. La Mesa, just east of the city, Lemon grove, a little father east, and the Cajon valley have also planted largely of citrus trees, and the Escondido and Perris sections have done their part.

The Mesa Grande, Fallbrook, Elsinore, Perris, Poway, Capitan, Grande and Escondido sections lead in the planting of deciduous trees, and during 1892 those sections shipped dried fruits to the Eastern markets. Each of these localities, besides all other portions of the county, has made preparations to actively enter upon tree-planting this season, and the number of trees to be set out will be considerably over a million during the year 1893.

The raisin industry has been on the increase, and the shipment, which has aggregated upward of two hundred carloads, an increase of nearly 100 per cent over last year, is likely to increase in a still greater ratio hereafter.

In the matter of irrigation there has been a marked advance during the year, and several districts already formed are moving with success almost in sight. The Linda Vista district, just north of the city, has been successful in issuing bonds and in disposing of a portion of them. The district is now the owner of the water rights, dam sites, and rights of way of the Pamo Water Company, and with the sale of other bonds will be able to place water on the lands and show some of the great advantages of irrigation in southern California. The district has seen the advent of many settlers during the year and much improvement.

Progress is not limited alone to business and advance



San Francisco and Bay.

in values. It is shown in the large increase in the number of wealthy and well-to-do settlers who have found homes in the county. New settlers have come in and purchased land under the line of the San Diego flume, or within reach of the Sweetwater system, and are improving it. Inside the city limits irrigation has been successfully tried. Lot stakes and block lines in some of the "boom" additions have been plowed up, and the city water system now carries water for the irrigation for some hundreds of acres of lemon orchards.

San Diego appropriately rounds off and completes the history of California. The magnificent exhibits made in the Junior Fair at San Diego, during the spring of the World's Fair year, could be fairly duplicated in almost every county in the State. Probably no other could show a tomato tree nine months old, nineteen feet high, and with branches extending to a diameter of twenty-five feet, loaded with bloom and fruit on the first day of February, but all could present wonders as unspeakably strange to the agriculturists of the East, and enough to convince them that the claim of California that this whole State is really "God's own country," is an indisputable fact.

CHAPTER XIV.

RAILROADS.

A history of California would be incomplete which neglected to speak of the first transcontinental railroad, which opened the eyes of the world to the feasibility of overcoming apparent impossibilities, and spanning a continent, bristling with engineering diffi-

culties, with a continuous line of steel rails. The desirability of such a route was recognized by all thinking people, and the possibility of building it was earnestly and persistently discussed from within a very few years after the discovery of gold at Coloma.

The agitation of the subject became so universal that the Government was induced to take notice of it, and several surveys were made by Government engineers to establish the practicability of building a road from some point on the Missouri river to the Pacific ocean, and the objective point on this side was conceded to be San Francisco. The demand for a transcontinental line had become so pronounced in the winter of 1859–60 that the conventions of both the great political parties, which met in the latter year, were forced to take notice of it, and each inserted a plank in the platform on which its candidates asked for the popular support, fully endorsing the scheme and pledging its leaders to use every endeavor to enlist the Government in the behalf of a Pacific railroad. Up to this time Government and other engineers were united in the opinion that any route but that on the thirty-second parallel, known as the Southern route, presented engineering obstructions which it would be impossible to overcome; or, if possible, the immense cost would prove an insuperable objection to its being undertaken by either the Government or private capitalists, or both combined.

Pending these earnest discussions, the Civil War was precipitated upon the country, blotting from the possibilities the Southern route, but making the construction of a road through the Western Territories to the Pacific an enterprise upon which might probably depend the very life of the Nation, and certainly the

ability to retain control of the rich and important States and Territories grouped on the Pacific coast. For several years preceding 1860, the Government had spent about eight million of dollars annually to freight army and Indian supplies, and carry the mails on this line across the continent. One year of turbulence on the part of the Southern sympathizers on the Pacific coast would inflict a greater expenditure on the Government for the transportation of soldiers and war material, if it designed to hold possession of this section of the country, than it would cost to build and equip the whole line, provided it was possible to find a passage through the great natural impediments on either the central or northern routes. At any rate, and without the increased expense which would follow on the heels of a conflict on the Pacific, the average annual expenditure for carrying mails and army and Indian supplies was doubling up with startling frequency. However great and vital as were the reasons for building this route, no one seemed to possess the courage to suggest a way by which it might be accomplished, much less undertake the stupendous work.

At that time there were resident in Sacramento five gentlemen who were known to their fellow citizens as wide-awake business men; capable, energetic and honest, but who never would have been selected as great organizing forces which could accomplish financial and engineering impossibilities. These were Collis P. Huntington, Leland Stanford, Mark Hopkins, Charles Crocker and Theodore D. Judah. The four first named gentlemen were interested in obtaining quicker and cheaper means of sending supplies from their places

of business in Sacramento to the active mining camps in Nevada, where the great bonanzas were then transforming men of no wealth into millionaires almost in a day. The fifth man was a thorough civil engineer, of some considerable experience, and possessing a wealth of rare judgment, which never made a mistake in regard to the grades and levels on a line which others had declared it impossible to utilize. Theodore D. Judah had thought much on the subject of a transcontinental road, and had viewed the mountains and canyons of the central route with the eye of an inspired surveyor. His knowledge and enthusiasm was precisely the leaven required to set the other four enthusiasts on the road which, difficult and disheartening in places, resulted in the grandest achievement ever accomplished by the same number of men in the history of the whole world. When the others spoke of the profits to be derived from a road to tap the Comstock camps, Judah pointed to the peaks of the Sierra Nevada mountains, and recommended climbing these where national necessities would compel the Government to meet their road with one from the Missouri. The same necessities would compel the Government to back the road with its endorsement, and most likely, with its money. He combatted every objection to the route, and inspired a confidence in his judgment and his scientific attainments which was never withdrawn till his death, and which received the approval of success from Sacramento over the summit to the promontory. The pity of it is that death claimed Theodore D. Judah before the completion of the line proved his judgment superior to that of all the distinguished engineers employed by the Government, and who had

repeatedly predicted disastrous failure for him and the courageous men who had staked money and reputation upon his assurances. All the work was performed on lines marked out by him, and his great worth remains green in the memory of the men who knew him well.

It is probable that the company organization for the building of the road across the Continent was completed in 1860; for on the anniversary of Washington's birth, 1861, Leland Stanford moved the first shovelful of dirt in the commencement of the great work, and his earnest associates then and there consecrated all the money, muscle and energy each possessed to the consummation of a work unmistakably inspired of God. From that time on there was no cessation of effort on the part of these men. If they ever lost faith for a little time in their ability to complete the work, the world knew nothing of it. Neither of the men was a "capitalist" as the term is now understood. They were simply industrious business men, with wills as firm as the rock of Gibraltar. They had counted the cost before engaging themselves to each other, and from the beginning till the end each was engrossed in sustaining, encouraging and strengthening the hands of the others. It has been said by some of these men that the chief difficulties were found before the first hundred and fifty miles had been completed. That is doubtless so. In their first appeal to the public they received a discouraging reception. The people of the coast could measure the necessities for the road with as much exactness as the officers of the Government, or the anxious loyal men of the East. They had as lively a knowledge of what the building of this line would mean for their chief city and their

whole section. They had millions lying idle in some of the city banks, and exhibited themselves proudly as patriotic and public-spirited citizens. Could these men expect less than that those so prompt with speech would subscribe generously to a work for whose necessity they were at all times on record? Listen:

The books were prepared, and a certain day extensively advertised as the occasion when the millionaires of San Francisco would have an opportunity to enter their names for a limited number of shares. Not a subscriber darkened their door! Believing that the moneyed men of San Francisco would protest against the enterprise passing into the control of Eastern capitalists, and that the first appointment had been misunderstood, another day was advertised, and was equally barren of results, only that a Frenchman subscribed for ten shares of stock. If this experience was not sufficient to convince the officers of the road of one or two things, nothing could. Either capitalists could say a great deal that was not meant, or they were going to have a trying time in creating confidence in their ability to exploit so great and necessary an enterprise.

There is no evidence that this sad disappointment of the projectors of the Pacific railroad ever depressed them, or caused a momentary doubt of the ultimate success of their undertaking. If the capitalists of California had adopted a procrastinating policy, the Congress of the United States was becoming more impressed with the vital necessity for promptness every day. The possibility of trouble with England had been made sensibly apparent by the Trent affair, and there was no way of knowing what other com-

plications might arise. Without a railroad across the mountains, the Pacific coast was practically a prize held out to any foreign nation inclined to accept it. So in 1862 an act was passed authorizing the organization of the Union Pacific Company to construct the road from the Missouri river to the California boundary line, and the Central Pacific Company to construct the balance of the road through the State, it being understood that the most difficult part of the whole line was that part lying toward the eastern limit of California, or over the Sierra Nevada mountains.

The Union Pacific Company found it impossible to enlist capital, any more than could the Central Pacific, which was a corporation organized under the laws of California. But the latter, in the spring of 1863, began to build rapidly. The legislature of California had endorsed the company bonds to the extent of $1,500,000, and the city of San Francisco had subscribed for $600,000 of the company stock; several inland counties had also voted bonds in aid of the road. The progress made was so promising that Congress, in 1864, modified the original contract to a considerable extent, and doubled the amount of the land grant. In 1866 the limit was taken from the Central Pacific Company as to its eastern end, and both companies were authorized to build until a connection was made. The time in which the whole road was to be completed remained as fixed by the original contract—in July, 1876. No premium was offered by the Government for its earlier completion, as is usual in the case of shipbuilding and other great works authorized by Congress. If these men had been merely "worldly wise," instead of being patriotic citizens, a bargain might have been made

with Congress, relieving them of at least 20 per cent of their obligations to the Government for every year they anticipated the contract time. This would have been an equitable arrangement, because every department of the government and every interest of the whole country was clamoring for the early completion of this great civilizing instrumentality. Had the Central Pacific Company been limited to the confines of California, as fixed by the contract of 1862, there can be no doubt that the Union Pacific Company would have required all the time allowed by that act to have reached the California boundary, and very probably would have been compelled to ask an extension of one or more years, as it was expected would be the case when the agreement was made by Congress.

There are some facts which make the wonderful work performed by these men appear the more remarkable. Every report made by Government engineers as to the impossibility of scaling the mountain ranges on the Central route; of the vast snowdrifts which assumed the proportions of avalanches, and would become insurmountable barriers during a large part of the year; the fact that the bonds were sold for greenbacks, and the high-priced employes demanded and received gold, then at a high premium, and the further fact that tools and material had to be brought around Cape Horn, which was always slow and dangerous, commanding the highest insurance premiums known—all operated to intimidate capital, and render it almost impossible to place the securities anywhere in the world. It will thus be seen that the Government, so anxious for the completion of the road, so deeply interested in having that event hastened, involuntarily became a

bear in the money markets of the world so far as the securities advanced by it to these men were concerned.

Nevertheless, and notwithstanding these unexpected impediments, they anticipated the contract time by seven years. It had been assumed by engineers and practical men that because of the great natural disadvantages under which the Central Pacific Company would labor, that the Union Pacific Company, having the assistance of all the railroad facilities of the settled portions of the Union, and an overcharged labor market to draw upon, would be able to reach the eastern boundary of California before the Central Pacific people could possibly overcome the obstacles on their shorter line, and that the former company would be waiting for them at the California boundary in July, 1876, or later, should the time have to be extended, as was expected. The facts are, that these giants had scaled the mountains, or dug away their peaks; had filled up the canyons; had covered in the road-bed for eighty miles with sheds which would withstand the crushing force of an avalanche. of snow, and stood ready, with sledge-hammer and spike, at the promontory, eight hundred and sixty-one miles farther than originally agreed upon, in May, 1869, completing the grand route seven years and two months sooner than was deemed possible by any railroad man or engineering expert when the original contract was formulated by the Congress of the United States.

Few readers have not heard the remark made, accompanied by a sneer, that any four reputable business men could have accomplished the work in as thorough a manner as did Stanford, Huntington,

Crocker and Hopkins. It is unfortunately true that there are large numbers of men so mentally constituted that they cannot commend what they lacked the ability to conceive. These might as truly declare that any reputable Jew could have led the Israelites out of Egypt. There was but one Moses, and his great ability as a leader did not rest in his name, but in the invincible power bestowed upon him by the Almighty. God never made a mistake in the selection of the instruments with which His ends were to be accomplished. He selected the four — the five — and His guiding hand was never lifted from their shoulders for a single hour from the time soil was broken until Leland Stanford drove the last spike which united the uttermost ends of God's country, and gave civilization and prosperity an impetus which it had not before received since the fall of man. Shame upon the grumblers.

After the work had been completed and the example set which was soon followed by other combinations of men, General Sherman, so near the Golden shore that he could espy the "gates ajar," gave this testimony to the glorious results it had achieved in one single direction out of the many:

"I now regard the Indians as substantially eliminated from the problem of the army. There may be spasmodic and temporary alarms; but such wars as have heretofore disturbed the public peace and tranquility are not probable. The army has been a large factor in producing this result; but it has not been the only one. Immigration and the occupation by industrious farmers and miners of lands vacated by the aborigines have been largely instrumental to that end;

but the *railroad* (the italics are the General's), which used to follow in the rear, now goes foward with the picket line in the great battle of civilization with barbarism, and has become the *greater* cause. I have in former reports for the past fifteen years treated of this matter; and now, on the eve of withdrawing from active participation in public affairs, I beg to emphasize much which I have spoken and written heretofore. The recent completion of the last of the four great transcontinental lines of railway has settled forever the Indian question, the army question and many others which have hitherto troubled the country. I regard the building of these railways as the most important event of modern times, and believe that they account fully for the peace and good order which now prevail throughout our country, and for the extraordinary prosperity which now prevails in this land. A vast domain, equal to two-thirds of the whole surface of the United States, has thus been made accessible to the immigrant; and, in a military sense, our troops may be assembled at strategic points and sent promptly to the places of disturbance, checking disorders in the bud"

Hon. Justice David Davis, of the United States Supreme Court, in delivering an opinion of that august body on the Pacific Railroads, places upon record these historical facts:

"Many of the provisions in the original Act of 1862 are outside of the usual course of legislative action concerning grants to railroads, and cannot be properly construed without reference to the circumstances which existed when it was passed. The War of the Rebellion was in progress; and, owing to com-

plications with England, the country had become alarmed for the safety of our Pacific possessions.

"The enterprise was viewed as a national undertaking, for a national purpose; and the public mind was directed to the end in view rather than to the particular means for securing it. Although the road was a military necessity, there were other reasons active at the time in producing an opinion for its completion besides protection of an exposed frontier. There was a vast unpeopled territory lying between the Missouri and Sacramento rivers which was practically worthless without the facilities afforded by a railroad for the transportation of persons and property. With its construction the agricultural and mineral resources of this territory could be developed, settlements made where settlements were possible, and thereby the wealth and power of the United States largely increased; and there was also a pressing want, in time of peace even, of an improved and cheaper method for the transportation of the mails, and of supplies for the army and the Indians.

"It was in presence of these facts that Congress undertook to deal with the subject of this railroad. The difficulties in the way of building it were great, and by many intelligent persons considered insurmountable.

"The scheme for building a railroad two thousand miles in length, across mountains, over deserts, and through a country inhabited by Indians jealous of intrusion upon their rights, was universally regarded at the time as a bold and hazardous undertaking. It is nothing to the purpose that the apprehended difficulties in a great measure disappeared after trial, and that the

road was constructed at less cost of time and money than had been considered possible. No argument can be drawn from the wisdom that comes after the fact.

"The project of building this road was not conceived for private ends, and the prevalent opinion was that it could not be worked out by private capital alone. It was a national work, originating in national necessities, and requiring national assistance. The primary object of the Government was to advance its own interests; and it endeavored to engage individual co-operation as a means to an end—the securing a road which could be used for its own purposes."

Under an act of congress a railroad commission was appointed to investigate the condition of all the railroads in the United States which had received aid from the Government, and the truth of the charges made against them. It was composed of Robert E. Pattison, now governor of Pennsylvania, E. Ellery Anderson, of New York City, and David T. Littler, of Springfield, Illinois. After the most thorough investigation, and after hearing the evidence of every one supposed to have knowledge of facts, this body of eminent men reported, as to adverse legislation:

"It is of the opinion that these roads have been embarrassed by the frequency with which bills intended to effect them have been introduced into the legislatures of States and Territories through which they pass. Many of these bills contained provisions which, if adopted, would have been ruinous to the railroads. Very frequently the persons introducing such bills failed to realize the effect which their passage would produce. The constant threat of the adoption of such measures has been a source of embar-

rassment to all the bond-aided companies, and has forced them to protect themselves by frequent and constant attendance before committees of the legislatures."

And further, as to the Central Pacific Railroad Company:

"Whatever amount there may be due to the Central Pacific Railroad Company, arising out of transportation, or services rendered by the branch lines, or by the unaided portion of the road, ought to be promptly paid to that company. It appears from the evidence and the report of the commissioner of railroads, that the Central Pacific Railroad Company has discharged all the obligations arising out of the Acts of 1862, 1864 and 1878, respecting the transportation applicable to the interest and bond account and applicable to the sinking-fund account, and also for the requirement calling for additional payments to the sinking fund until the amount of such payments should equal twenty-five per cent of the net earnings. The United States has therefore *no demand or claim on account of which it can justly retain any amount* which is due from it to the Central Pacific Railroad Company; and the amount so due ought to be paid and discharged without delay."

The United States Commissioner of railroads sums up his conclusions in regard to the whole matter:

"The purposes of Congress in granting the liberal aid extended to these companies were held to be important elements in arriving at the true construction of their present relations to the Government. *All these purposes have been much more than realized;* and it has been frequently and officially stated that the actual

saving, year by year, to the Government greatly exceeds the whole annual interest paid."

The whole grand prosperity of California, but faintly portrayed in the pages of this history, and the remarkable growth of the entire Pacific coast are evidences of the good which must be credited directly, and without limit, to the completion of the four great transcontinental lines—the Pacific system, Santa Fe, Northern Pacific and Canada Pacific lines. No one dares assert that the three latter lines would have been attempted had not the Pacific system projectors blazed the way, and proved its practicability and profit. Therefore, honorable men will not be slow to render unto "Caesar the things which are Caesar's," and place the honor where it justly belongs. Not an acre of the vast area beyond the Missouri, but can be reached and occupied without fear of the scalping knife, and with the assurance that the products of industrious hands can be marketed, and their full value realized.

The great American people are most remarkable for devotion to principles of exact justice. To no other jury ever empaneled can a fact or principle be submitted with such absolute certainty that a correct verdict will be rendered. To them the cause of the Pacific railroads should be given in all its details. Garbled statements by anarchist demagogues are deserving of no consideration. A contract was executed between the projectors of the system and the people of the United States. The road was in successful operation seven years and two months sooner than the contract demanded, and at an expense to the contractors many millions of dollars greater than if the completion of the work had been extended

to July, 1876, the hundredth anniversary of the greatest nation on the globe. No pen can detail what has been gained by the whole people. Imagination becomes as confused in attempting it as when trying to figure the extent of the illimitable space outside the atmosphere of the earth. But in 1885 figures were given showing what return the Pacific roads had made to the Government in cash values. With that balance sheet, for there is none later, this history submits the case to the impartial judgment of the great American people—a righteous jury.

Bonds endorsed by the U. S. Government,	$ 27,855,680
Amounts credited to the company for freight on supplies, munitions of war, carrying troops, mails, etc., -	20,963,313
Amounts that the same service would have cost the Government at the rates paid before the completion of the road,	160,311,054
Deduct amount credited to company,	20,963,313
Saved to the United States treasury,	$139,347,741
Or state it thus:	
Saved to the Government, - -	139,347,741
Entire amount due from company for unpaid bonds, accrued interest, etc.,-	86,661,834
Actually due the company, - -	$52,661,834

And that would have been the state of the account had not this powerful and wealthy Government arbitrarily reduced the rates for the service it required to the terms which suited it, and without consulting the necessities or convenience of the Pacific companies.

It is scarcely possible that any one can read the foregoing record without arriving at a correct conclusion

as to the vast importance to the whole country of the Pacific railroad system, and the honorable and conscientious manner in which it was perfected. There is yet another fact which people who have settled along the main line and branches of the Pacific railroads do not fully appreciate. Without taking into consideration the almost insurmountable difficulties attending the building of the first road, and the vast and unusual expense, the charges on the road and branches are much less for fare and freight, comparatively, than anywhere else in the world. To arrive at correct data, the sparsely settled country must be considered. A few figures will more clearly show to what extent California people are favored, and how great should be their congratulation. Take the Chicago, Milwaukee & St. Paul; Chicago & North-Western; Chicago, Burlington & Quincy, and the Chicago, Rock Island & Pacific railways. For the first 140 miles out of Chicago these roads run through almost a continuous farm or town, with a population averaging more than 210 to the square mile. They are lined with productive manufactories. The fare is three cents a mile, or $4.20. The fare from San Francisco to Sacramento, 140 miles, is $3, or a little over two cents a mile, and the population averages 36 per square mile, less than one-sixth of that along either of the Illinois roads named. Go farther east. It is 90 miles between New York and Philadelphia, and the fare is $2.50, and the trains scarcely get out of sight of each other, and are always crowded. From New York to Washington City is 236 miles, and the road passes through Baltimore, Philadelphia and numerous other cities of large size and business. The fare is $6.50. First-class fare

between Chicago and Council Bluffs is 2½ cents per mile; between Chicago and Pittsburg, 2¾ cents per mile; between Chicago and Buffalo, 2.59 cents per mile, and between Chicago and New York, 2 cents per mile. The cost of fuel and other operating expenses are as much greater, proportionately, on the Pacific road and branches as was the cost of building the first continental road greater per mile than the construction of one of the Eastern lines. Until settlements are as thick through California as they are in Illinois or the New England States, it will be unfair to expect the railroad service to compete with the prices charged on Eastern roads. Taking everything into consideration the people on the Pacific coast, and in California especially, are obtaining railroad facilities, with all the term implies, cheaper than any other people in the world, and that without the help of competing lines.

No railroads have been built in California which gave returns to their promoters from the start. The patriotic purpose of developing the country through which they passed was accomplished, and residents along the new lines reaped the advantage immediately. Two lines, which have built up wealthy settlements, ruined their projectors. The late Senator Milton G. Latham sunk an immense fortune in building the road from picturesque Sausalito, through beautiful San Rafael, over and through mountains to Cazadero in Sonoma county, a distance of eighty-seven miles from San Francisco. His enterprise entitled him to the gratitude of every citizen in the State, excepting only the members of his own family. They were never able to get a return of any considerable part of the millions the road cost him. The tourist thanks his

memory; for more beautiful scenery is not found in Europe, and the picnickers at Camp Taylor enjoy conveniences of city and country, and gather health and enjoyment, because of his prodigality. And the improvements which the road created, and the prosperous homes it established, have made it the paying property which Senator Latham predicted it would become, but which were not realized at the time of his death.

The San Francisco and North Pacific railroad was projected by the late Peter Donahue, who seemed capable of making any investment which promised to build up the country and give employment to the idle. This road was built from Tiburon, across the bay from San Francisco, with the intention of reaching the grand redwood forests in Mendocino county. Before reaching that point Peter Donahue died, and long before the road became self-sustaining. Branches had been projected, and expenses assumed which well-nigh impoverished the estate of this several times millionaire. But the country was benefited, and every section it reached in Marin, Sonoma and Mendocino counties made prosperous. The road is now on a paying basis, but the fortune of Peter Donahue is buried under its roadbed. This has been the experience in regard to every branch built by the great transcontinental lines. At first the construction and operating expenses were so much dead capital, and so continued until the creative power of the railroad builded productive homes, and inaugurated enterprises which gave the company business. In time the projectors might hope for remuneration, unless death overtook them, as was the case with Senator Latham and Peter Donahue, before the turning point was reached.

CHAPTER XV.

SKETCHES OF REMARKABLE MEN—WHAT THEY HAVE DONE.

The readers of the California Gold Book will be interested in knowing something more of the men who have had such a remarkable influence upon the progress of California, and whose every act has been so closely identified therewith. Their connection with the inception of the great enterprises which have changed the wild valleys and foothills into happy homes has been given as fully as the limits of this work would permit, and very little need be added thereto.

COLLIS P. HUNTINGTON, now president of the Southern Pacific Railroad Company, was born in Harwinton, Connecticut, October 22, 1821. His father was a wool manufacturer, and a prominent and successful citizen of that place. Of his characteristics it is unnecessary to speak. The law of heredity is fixed. Marked individual peculiarities are reproduced with unmistakable distinctness. The lessons inculcated in his early home have governed the life actions of the son, and are impressed upon the growth and enterprise of the whole country. They are in a shape to be recognized in the coming time, by those who will have a share in their advantages, both in the Southern States from the city he has builded at Newport News on the Atlantic, through the vast territory to the large and prosperous communities on the Pacific ocean.

When twenty-two years of age Mr. Huntington began mercantile business with an older brother at

Oneonta, New York. That continued until 1849, when he removed to California, and commenced business on the same lines at Sacramento. An early habit was transferred to the Pacific coast, which, considering the time and invariable customs prevailing, shows the invincible will of the man in a remarkable manner. It is probable that his was the only place of business on the whole coast which did not open its doors to customers on the Sabbath. It was also the only one where every convenience was provided for the use of employes inside the walls of the place of business. There they were provided with better board than could be obtained at the eating houses of the bustling frontier town. Reading matter was supplied them in abundance and variety, and their evenings could be pleasantly spent, and none of them need be subjected to the temptations of the gambling places and saloons which were never closed, day or night, on all the prominent streets. The cost to him of these conveniences were not reckoned by Mr. Huntington. Their effect upon the comfort and morals of all to whom he paid the extravagant prices then ruling, was his sufficient recompense.

In 1855 the firm of Huntington, Hopkins & Company was organized by the connection of Mark Hopkins. It continued business on K street, Sacramento, and no change was made in the kind of goods handled or the rules governing its internal or external management. The credit of the firm was gilt-edged. It was here that the initial combinations were formed of which Collis P. Huntington, Mark Hopkins, Charles Crocker, Leland Stanford and Theodore D. Judah, became ONE in the greatest and most difficult railroad

enterprise of any age or country. The remarkable fact that these men maintained their individuality, and yet worked in absolute harmony, without clash, but on terms of the closest friendship and intimacy, until one by one the members of the close co-partnership are being released from their share of the work by death, is as unusual and wonderful as the unexampled success which has attended the efforts of the combination. Neither in statecraft, in generalship, nor in fiancial matters, has this record a parallel. The more intimate and perfect the knowledge of these men became of each other, the more positive and fixed became their mutual confidence and respect.

In 1863 it became necessary that the Central Pacific Company should have an actual abiding place at the great money center in New York. It was not practical for all the members of the company to remove there. Anyone of them would answer the purpose, for the plans and inspirations of all were identical. Collis P. Huntington was supplied with the power of attorney of the others, which was never changed or revoked, and became the living embodiment of the Central Pacific Company in the East, at the Federal Capital, and in Europe, clothed with full power to stake the financial and personal worth of every member upon the progress of the great undertaking. The efforts required of him were herculean, and cannot now be measured, because the splendid results have led men to the conclusion that if the difficulties had been very great, the out-side limit permitted by the Government contract would have been expended in completing the work, instead of being anticipated by more than seven years.

Now, if the principles of exact equity be applied in

forming judgment of Collis P. Huntington, his success in life must necessarily distinguish him as great, for no man can do more than right. While his successes may be ever so unprecedented, and his accumulations fabulous, he has never invaded a right, or weakened the opportunity of a human being. He has simply showed the possibilities open to all men, and the energy required to make a struggling world better by means of the untiring efforts of one man.

It is not within the scope of this work to detail what Collis P. Huntington has done for eastern Virginia. This entire work is replete with facts as to what he and his associates have accomplished for California and the Pacific coast. Knowing that great tracts of land under the ownership of one man deprive numbers of men of moderate fortunes from obtaining homes, he has lately obtained possession of a large tract of fertile land in the Sacramento valley, and under his instructions this is to be divided into small farms, and sold to immigrants. An exact account is to be kept of all expenses attending the work, and when all is sold, any profit which has attended the transaction will be returned to the happy purchasers, pro rata to the amounts they paid for their farms. This is an experiment, and if it succeeds, there is no doubt but other public-spirited land-owners will follow his example, and the great State of California will be the principal gainer, though every one of the numbers so fortunately located will have reason to bless Collis P. Huntington.

MARK HOPKINS.—The late Mark Hopkins was chosen treasurer of the Central Pacific Railroad Company at its organization, and retained

the place until his death. He was the oldest member of the powerful organization, having been born at Henderson, New York, September 1st, 1813. When he was twelve years old his father removed to St. Clair, Michigan, and died there soon after.

Young Hopkins determined on a mercantile career, and at the age of 16 found employment with a firm doing business in Niagara county, New York. As it was only a small country store, his advantages were not first class; but as it kept a general assortment of goods, he became acquainted with the average wants of a community, and early learned to wisely select such a stock of goods as would likely be in demand. From this situation he graduated as senior member of the firm of Hopkins & Hughes, doing business at Lockport, New York.

Mark Hopkins was ambitious for intellectual improvement. He had a brother practicing law at Lockport, and he commenced the study of that profession with him while he was engaged in merchandising. It was not his intention to change his business, but the study of the law was undertaken solely for the benefit of the training it would afford.

In 1849 Mr. Hopkins determined to remove to California, and arrived there August 5th of that year. Soon after he opened a store at Placerville, and freighted his own goods from Sacramento to that point by ox team. The following year he formed a partnership with E. V. Miller, and a wholesale grocery was established. The business was prosperous, and was continued uutil his partnership with C. P. Huntington in 1855. The firm of Huntington, Hopkins & Company dealt mainly in hardware and miner's supplies, and early

established an extensive branch at San Francisco. His connection with this firm was continued until his death in March, 1876. He left a great estate, and all of it was given to his widow absolutely, to do with as seemed to her best. The grand home he built for himself on California street has finally passed into the possession of the University of California to be used as an art studio, and for the display of the work of artists.

CHARLES CROCKER.—The late Charles Crocker was a manly man, who was the architect of his own fortunes. His native place was Troy, New York, where he was born on the 16th of September, 1822. At ten years of age he began to earn money, and it was put to the best imaginable use—aided his father in paying for a farm in the State of Indiana, to which the family moved in 1836. For two years this manly boy assisted his father in clearing the land and preparing it for a crop. Then he found employment for a time in a saw-mill. Later he got work at a forge, and here he was paid $11 per month with board, and the privilege of attending the district school in winter, and upon this last he placed the highest possible estimate, and of it made the very best use. Young Crocker became thoroughly proficient at the business, and before long had a shop of his own, and made money.

In 1850 Mr. Crocker crossed the plains, and began merchandising in Sacramento. At first the customers were almost exclusively miners, and the stock was such as these would require. When Sacramento began to have numbers of society people, and there were calls

for ladies' dress goods, he added a supply of dry goods. In 1860 Mr. Crocker was elected to the legislature on the republican ticket, and helped materially to create and encourage the loyal sentiment which was all needed in the affairs of California a year later. His privilege of taking a decided stand for the Union in that body at that time was one to which he ever referred with pride.

In 1862 Mr. Crocker disposed of his business, so as to give his whole time to the interests of the Central Pacific Railroad Company, in the organization of which he had taken such a prominent part only a year before. He had then given up everything in this same interest, and now he devoted every energy to the enterprise. He was the mechanic of the quartette, and his old proficiency in handling iron became specially valuable now. His efforts were so closely interwoven with that of his associates that to tell what they accomplished is to tell what Charles Crocker did to further the interests of the road. No one of this company has ever been known to claim any credit distinct and apart from that due the others. The members of the company were one.

In 1852 Charles Crocker married Miss Mary A. Deming, of Sacramento. The union was a happy one. Mrs. Crocker became interested in many of the benevolent operations in San Francisco, as she had previously been in Sacramento. Indeed, it may be said that she is a leader in many of the plans arranged for improving the condition of the people. She had the co-operation of her husband up to the time of his death, which occurred August 14, 1888, and a place became vacant which it will be hard to fill. The grand qualities which made Charles Crocker an efficient aid to

his father when only ten years old, made him a generous friend, and a reliable aid under any and all circumstances. He left a name for great liberality, and numbers of men, to whom the world had proved unkind, are in places which his thoughtfulness secured for them, and enjoying the comforts of life, which they owe to him.

ALBAN NELSON TOWNE is now vice-president and general manager of the Southern Pacific Railroad Company. His first position in connection with the Pacific Railroad system was that of superintendent of the Central Pacific Company, and that was tendered him without solicitation, and at a salary named by himself. From various causes Mr. Towne has been more en rapport with the clientele of the Pacific roads than any other official of the companies, and he holds the esteem and good will of all of them. He is worthy of the good feeling had toward him, and is considerably more than a remarkable man with remarkable antecedents. On March 25, 1620, William Towne married Joana Blessing. In 1640 they were residents of Salem, Mass. From that on down to May 26, 1829, on which date A. N. Towne was born, the people of that family name were among the most actively prominent in that part of Massachusetts. His birth place was in Worcester county, in that State. His grandparents, on both sides of his family, were distinguished participants in the Revolutionary war, and in all the trying times contiguous thereto. The noble characteristics of his mother are reproduced in himself. He married Miss Caroline Amelia Mansfield

before starting west on a merchandising tour. He had tried carpentering, house painting and merchandising while in the East, succeeding best with the latter business; but he had not yet found the occupation for which he was exactly adapted. In 1855 he was at Galesburg, Ills., and could not consider the results of his merchandising trip as anywhere approaching a success. He asked for a place as freight conductor on the Chicago, Burlington & Quincy road, and got it. The tide which floats a man to fortune had found him, and he was astride of it. Railroading then was different to the business now. The person ambitious to obtain a position of prominence had to know all there was to be learned. It was as necessary that he should be able to successfully doctor a hot-box as collect a fare. He realized this and became thoroughly familiar with every detail of every department that came within his ken. He went through the official gradations on express schedule time with no stops. Within a year from the time he became freight conductor he was train master, and in a brief time he was assistant superintendent. After eleven years' service with this road he became superintendent of the Chicago & Great Eastern Company. His ability to select and handle men was Napoleonic. He made no mistakes. His subordinates had confidence in his master mind, and obeyed orders without asking what the orders meant. He was a wonderful success—a grand master in his profession.

These great qualities were observed by the managers of other lines. They were exactly the desideratum in the make-up of most roads in the country. They were the qualities whose possession meant dividends to the

stockholders, and the presidents of other roads began to covet the services of this man. The first company to make a bid for his services was the Union Pacific Company. It baited its hook with the general superintendency, carrying a fair salary and almost unlimited power. It was scarcely a temptation to leave the employ to which he had been so long and agreeably attached. Then came Mr. Huntington, and his first bids were rejected. The great railroad authority tired of that; said he: "Consult the officers of your company, and telegraph me what salary will induce you to take the superintendency of the Central Pacific Company." Mr. Towne did so, naming a sum more than twice and a half more than he was then receiving. Promptly he had a telegram: "Come on. Collis P. Huntington." That added A. N. Towne to the effective force of the Pacific Railroad system, which is now superior in executive ability and energetic force to any railroad combination in the world, and for that one reason is the target for the malevolent and leveling tendencies of the anarchist classes, and many others who would spurn the intimation that they were doing the work of these enemies of order.

But it is not alone in the management of a powerful railroad that Mr. Towne is great. In the last few years, when the irresponsible agitators have influenced Congress to enter upon long and laborious investigation of the methods of business pursued by the Government-aided companies, Mr. Towne has frequently been before the Commissions appointed by Congress. The information he has supplied has been clear and conclusive, and supported by irrefutable facts and figures, which greatly lessened the work of these bodies. It

is greatly to be regretted that the papers prepared by Mr. Towne have not been placed before the same readers who had been deluged with newspaper complaints against the aided roads, and charges, reaching from simple misdemeanors to public robbery gigantic in character. These papers of Mr. Towne would have had the same effect upon the public which they produced upon the investigating bodies, and would have given intelligent readers new and valuable ideas in regard to the relative duties and obligations of corporations and the people. They stamp Mr. Towne as a conservative statesman of superior ability, and deserve an audience much greater than they can ever obtain as parts of the reports of Congressional Commissions. The clear and masterly statements prepared by Mr. Towne should be placed before the public in popular form. They would prove great educators, and would remove troublesome doubts as to the manner in which all the aided companies have complied with their obligations to the people. The American people can be depended upon to decide justly any question properly placed before them, and these papers would put them in possession of important facts, of which, unfortunately, they are now in complete ignorance.

SENATOR LELAND STANFORD.—At no time in the history of the world, and nowhere outside of California, have such vast accumulations of money by individuals been devoted to the regeneration and improvement of mankind as in California, by Californians by adoption. Foremost among these is Leland Stanford and his devoted helpmate. Others

have dealt generously with their fellows, giving a fair percentage of the sums entrusted to their keeping for the enlightenment of the world. Senator and Mrs. Stanford have devoted practically all of their great possessions to the uses of those of their own and succeeding generations down to the end of time.

A brief review of the career of Senator Stanford serves to emphasize the assertion in one of the opening chapters that the All-wise Eternal had directed every event in the history of this land, and had been the ever present "cloud by day and pillar of fire by night," inspiring every act of prominent individuals for the benefit of the race. The results prove this as unerringly as though He had declared "for this purpose have I raised thee up."

It is decidedly commonplace to say that Leland Stanford was born at Albany, New York, March 9, 1824, and that after a creditable youth, spent exactly as his other youthful associates spent theirs, divided between work in summer and the district school in winter, he finally determined on adopting the profession of law, and at twenty began reading law with Messrs. Wheaton, Doolittle & Hadley. Two years diligently devoted to study enabled him to pass an examination and receive authority to appear before courts in the interest of clients. Then he went west, and opened an office at Port Washington, Wisconsin, where, when he deemed himself so well established as to render taking to himself a wife, a matter of prudence and justice to the woman who was to be one with him until death, he returned to Albany and married Miss Jane Lathrop, the daughter of Dyer Lathrop, a successful merchant, and citizen of standing. Together they

returned to Wisconsin, and no doubt with the hope and expectation that there their lives would be passed. Here he met with his first important mishap, and at the time one that appeared most disastrous and disheartening. A fire destroyed his library and nearly every valuable he possessed. With the light we now possess, we unhesitatingly declare this apparent misfortune to have emanated from a merciful and all-seeing God, and to have been the means of severing his connection with Wisconsin interests, in pursuance of the grandest purposes.

Previous to that time one of the brothers of Leland Stanford had been drawn to California by the discovery of gold, and was selling merchandise and other supplies to the miners and doing more or less prospecting and mining. Neither Mr. nor Mrs. Stanford cared to return to Albany whence they had lately gone with such brillant anticipations. They determined to come to California, of which the brother could not do otherwise than paint in glowing colors. They arrived here July 12, 1852, and Leland Stanford engaged earnestly with them in mining and mercantile ventures. After four years, mostly spent at Michigan Bluff, Placer county, in 1856 he removed to Sacramento and became a partner in the extensive business which the brothers Stanford had built up, and which extended to every part of the State.

In 1860 Mr. Stanford was sent as a delegate to the Chicago convention. Nothwithstanding the great regard every native New Yorker was supposed to have for Mr. Seward, Mr. Stanford earnestly espoused the cause of Abraham Lincoln, and a friendship was then formed between the two, founded on mutual regard,

which continued unabated until the death of Mr. Lincoln. From the first intimation of trouble between the North and South, Mr. Stanford was a pronounced Union man, and was not slow to declare his reasons for the faith that was in him. The South had sympathizers in California, far more noisy than numerous, and yet sufficient in numbers to give the friends of the Union cause for uneasiness. Against his personal wishes Mr. Stanford was nominated for governor in 1861, and at considerable sacrifice accepted the nomination and thoroughly canvassed the State. He was elected by a plurality of 23,000 votes, which was very unexpected success under the difficulties attending affairs. His administration was marked by a clear exposition of patriotic principles, and all his state papers were characterized by an intimate comprehension of State and National questions, and when he retired from office the loyalty of California was second to no State in the Union. He was urged to accept a second term, but that was not in accord with the plans of the Great Ruler. The great transcontinental line which he had been inspired to commence, and the first shovelful of dirt on which he had thrown out February 22, 1861, nearly a year prior to entering upon his duties as governor, demanded his personal attention and supervision. For the time he peremptorally declined political position.

In 1887 Leland Stanford was elected United States Senator, and in 1891 was chosen to succeed himself. His course in the Senate has met with the approval of the general public, excepting only in the proposition to loan public money on reliable securities, to needy farmers and others, at low rates of interest. This

measure has been harshly criticized, and especially by the large and influential class of money-lenders, who see their own loss in the success of such an innovation. It has been usual to leave a considerable portion of the surplus belonging to the country in the possession of banks without interest. Of course these favored institutions seriously object to any reform which would deprive their stockholders of the free use of millions of Government money. A rapidly growing minority of the people of the country heartily endorse the proposition of Senator Stanford, and there seems to be little doubt that, when properly understood, the measure, somewhat modified, will receive the earnest approval of a large majority of voters outside the influence of banks and money-lenders.

The great wealth of Senator and Mrs. Stanford has enabled them to show whether they considered it bestowed for their personal aggrandizement, or as a sacred trust to be used for the improvement of their race. It is a fact well known in California that both of these broad-minded people have been very liberal to all charitable objects without regard to creed. The only question asked by them was as to whether the money they were ready to give would be expended for the relief of the distressed, and the improvement of their fellow citizens.

A few years ago the world was astounded by the rumor that Senator and Mrs. Stanford had determined to devote many of the millions they possessed to the erection and endowment of an educational institution superior to anything of the kind in the world, and that this grand benefaction was in accord with the expressed desires and intentions of a deceased son who would have

inherited all their vast accumulations if he had lived. The world is nearly six thousand years old, and during that time many devotedly cherished children have preceded their parents to the golden shore, but this is the first instance where the bereaved have been inspired to carry out expressed wishes with such munificence, and to rear a monument to the loved and lost as much grander and more enduring than marble as the love of God is tenderer and more true than that of any human. It was beyond human belief to accept the rumor as true, and yet the reality proved the first rumor but half the truth. The sum in cash and lands, the value of the latter of which was continually enhancing, devoted to the endowment of the Leland Stanford Junior University, on a conservative appraisement, amounted to twenty millions of dollars.

Having determined upon the consummation of this mighty benefaction, shortly after the death of his son, Senator Stanford actively set about the undertaking. The laws of the State in regard to the protection of the endowments of institutions of learning were rather lax, and to remedy this in 1885 the Senator draughted and secured the passage through the legislature of an enactment placing further safeguards about the administration of the finances of all such institutions, and making some changes in the form and method of incorporation. Having thus completed the preliminary steps, he proceeded at once to the consummation of his plans. The selection of trustees was a delicate and difficult matter, but being an acute judge of human character, and having a thorough acquaintance with and knowledge of all the prominent men of the day, Senator Stanford was able to unerr-

ingly choose those who are the right men in the right place. The gentlemen to fill the important position were: Lorenzo Sawyer, one of the presiding judges of the United States Circuit Court, San Francisco (since deceased); James McM. Shafter, San Francisco, lawyer, formerly State senator, and ex-president of the State Agricultural Society; Charles Goodall, San Francisco, of the Pacific Coast Steamship Company, formerly a representative of San Francisco in the legislature; Alfred L. Tubbs, merchant, St. Helena, Napa county, formerly senator from San Francisco; Charles F Crocker, San Francisco, vice-president of the Southern Pacific Railroad Company; Timothy Hopkins, San Francisco, treasurer of the Southern Pacific Railroad Company; Henry L. Dodge, San Francisco, merchant, formerly a State senator from San Francisco and ex-superintendent of the mint; Irving M. Scott, San Francisco, of the Union Iron Works; Dr. H. W. Harkness, San Francisco, of the San Francisco Academy of Science; Horace Davis, merchant, San Francisco, ex-member of Congress from San Francisco; John Boggs, farmer, Colusa, formerly State senator from Colusa, a director of the State Agricultural Society and of the Board of Prison Directors of the State; Hon. T. B. McFarland, Sacramento, formerly in the legislature of the State from Nevada county, and an ex-judge of the Superior Court of Sacramento; Isaac S. Belcher, Marysville, formerly of the Superior Bench of California; John Q. Brown, Sacramento, ex-mayor of Sacramento; George E. Gray, San Francisco, ex-chief engineer of the Southern Pacific Railroad Company; N. W. Spaulding, Oakland, manufacturer and ex-United States sub-treasurer, and grand treasurer of the

Grand Lodge of Free and Accepted Masons of California; Matthew P. Deady, Portland, Oregon, presiding judge of the United States Circuit Court of Oregon; William M. Stewart, Virginia City, Nevada, ex-United State senator from Washington, Nevada; Stephen J. Field, Washington, D. C., justice of the Supreme Court of the United States; Joseph D. Grant, Esq., of San Francisco; S. F. Lieb, a prominent lawyer of San Jose, and Rev. Horatio Stebbins, D. D., of San Francisco.

Shortly after the announcement of the names of the trustees, they were summoned to the residence of Senator Stanford, and there was delivered to them the grant, executed by Senator and Mrs. Stanford, which endowed with millions an institution which was to bear the name of their lamented son. On the delivery of the important document, Senator Stanford, in a short speech, briefly stated the objects at which he aimed. Simply and beautifully he told of the origination of the grand project, and the hopes which his wife and himself had centered in its consummation. The proceedings lasted but little over an hour, and neither Senator nor Mrs. Stanford betrayed the least consciousness that they considered the act other than one of simple duty, which they owed to the country of their birth. The matter of giving away millions was so unostentatiously performed that none present could help but marvel. It showed the high character of the donors and the lofty aims which animated them. Vast as the gift was, the Senator intimated that it was not all they intended to do. He stated that the wills of both himself and wife had been made but shortly previous, and at their

death the University would receive additional bequests and benefits.

The grant states that the aim of the founders is to establish a University in the broadest sense of the word. It shall include such seminaries of learning as shall make it of the highest grade, including mechanical institutes, museums, galleries of art, laboratories, conservatories, together with everything necessary to the proper understanding of agriculture in all its branches, for mechanical training, and the studies and exercises which tend immediately to the enlargement and cultivation of the mind. Its object is stated with a simplicity and force which allows of no misunderstanding and shows the wisdom of the founders: "To qualify students for personal success and direct usefulness in life."

Its purpose is also stated in a similar succinct manner: "To promote the public welfare by exercising an influence in behalf of humanity and civilization, teaching the blessings of liberty regulated by law, and inculcating love and reverence for the great principles of government as derived from the inalienable right of man to life, liberty, and the pursuit of happiness."

To those who have felt the shadow of a great sorrow, the language in which is couched the clause naming the University has a touch of pathos. It reads: "Since the idea of establishing an institution of this kind for the benefit of mankind came directly and largely from our son and only child, Leland, and in the behalf that had he been spared to advise us as to the disposition of our estate, he would have desired the devotion of a large portion thereof to this purpose, we will that for all time to come the institution hereby founded shall

bear his name, and shall be known as "The Leland Stanford Junior University."

The plan of the founders of this wonderful benefaction to California children, and through them to all the aspiring youth of other lands down to the end of time, has been clearly stated by Senator Stanford

"The future of the State of California will equal in its greatness the capacity of the human intelligence for expansion. Nowhere are the conditions of life happier and better, no place on the globe contains so fully the resources necessary for the physical and intellectual improvement of mankind.

"The faculty for advantageously using the resources of nature, which is only bounded by the almost illimitable range of human conception, is all that is needed to place this state in the position it is possible for her to occupy—the land of the highest development of human comfort and intellectuality.

"To advance that time was my object in founding the institution at Palo Alto which bears the name of my son. I was satisfied when I provided for this institution that all education tends to the physical as well as the intellectual advancement, and what man does for education he does for civilization. Any education does this, but I hope to have more from my institution. I want to improve the methods of education.

"I was struck by a remark that Professor Agassiz made to me when he was here and examined the great glacier. I asked him if he thought it would ever be accounted for. He answered that it would. He said that when the system of education was so much improved that the knowledge of the mineralogist, the geologist, the paleontologist and the astronomer were combined in one person the theory would be understood.

"We had quite a lengthy discussion about education that impressed me very much, and when I recall that the source of supply from which it all came would not be materially affected — that is, the mines and fields and cultivation of the soils that give us these things would not be appreciably lessened. I have great faith in man's power to perfect his control of the forces that surround him.

"Already the discovery of the power of steam and the way to control it, has added immensely to the power of production, though nearly all the labor-saving inventions have been brought into use during the present century. How immeasurably this power of production has been increased in the last fifty years is beyond conception.

"It was centuries before Watt noticed the throbbing of the boiling water in the tea-kettle, and gave us one of the natural forces that we have controlled to a limited extent. So with the element of electricity— to what extent we can control it can not be told, but we have reason to hope for great things from this great power. With this increase of the power of production the time will come when provident and industrious men may have all the comforts and luxuries that are now only within reach of the rich. Labor, properly distributed and aided, will do even more for the intellectual requirements of man than for his physical needs. Physical needs are small in comparison to the intellectual requirements, for, while the former are limited, the latter are capable of indefinite expansion. Our capacity for intellectual pleasures increases with our enjoyment of them. It is not so with the physical. A man's mind can never be filled to repletion, nor his appetite for beauty and art satisfied.

"In view of these things I wish my school more especially directed to the investigation and teaching of how to control the forces of nature—how to make the elements the servants of man—from the kindergarten pupils to the post-graduate pupils who may have a desire for deeper investigations.

"My aim is to make the education very general in character; and, particularly, I want the students to understand that labor is respectable and that idleness is disreputable. We propose to fit the student, so far as practicable, for his after life, and not to confine our course to literature and art.

"I deem it especially important that the education of the female should be equal to that of the male, and I am inclined to think that if the education of either is neglected it had better be that of the man than the woman, because if the mother is well educated she insensibly imparts it to the child. I remember that Bain, in his Elements of Criticism, says that a child in the first seven years of its life has more new ideas than in all his after life. Voltaire says, I think: 'If you give me the education of the child up to five years I do not care who educates him after that.' The mother's system of teaching is substantially the kindergarten system. This is the opinion of Professor Agassiz.

"My own son never went to any school except the kindergarten. On one occasion he came home delighted with something that had opened his mind, and wanted to tell me about it. His teacher required all the children to bring some natural object to school as a subject for a small talk. My son had taken a pebble to the school. His teacher looked at it, and noted that it was round. She explained that that indicated that

it had probably been rolled back and forth on a beach, for if it had been in a running stream other stones passing over it would have flattened it. Then she discovered that it was sandstone, and she told him all about the formation of the rocks. Then she saw a scratch on it, and explained how that might have come —maybe from a stone passing over it or perhaps from a glacier. This opened the way for a talk about glaciers which unfolded to his mind the truths of nature, and so interested him that I am satisfied in his short life this episode of his kindergarten training turned his mind in the direction of inquiries, the answers to which were an education in themselves. I became much impressed with this incident, and in following out the course of education that impressed him so deeply I hope for great things.

'The current publications are really the great educators, because they preserve and disseminate ideas wherever people can read, and do much in raising the standard of intelligence among the people, thus enabling the many to appreciate and take advantage of the genius of the few.

"It is a lack of education alone that makes the great mass of the European peasantry so slow in adopting the modern improvements. They do not use machinery because they are neither aware of its existence nor able to appreciate the advantages of its use. One cannot fail to remark even the great superiority of hand-tools in America over those in use abroad. The greatest extravagance in Europe—greater than that of their large standing armies—is in the waste of labor, using their hands and poor tools instead of machinery and fine tools.

"So I want these schools to provide an education to make the people, so far as possible, able to secure the fullest amount of comfort and luxury from the natural resources that are at their disposal. I want to teach the people how to make their living, and satisfy their physical longings, that they may have the largest possible amount of time and means for the enjoyment of intellectual pleasures.

"The possibilities of human enjoyment are as boundless as the beneficence of the Creator, and the Creator could not have placed His great gifts beyond us, for there is no beneficence in the existence of the unattainable. That being the case, and I think the proposition does not admit of doubt, it becomes the duty of those having the means in their power, to teach the people how best to attain all the good possible in this life.

"Because that has not been the case in Europe for want of education, there was no progress made there up to the present century. They were cutting grain with a hand sickle when the genius of McCormick enabled us to cut, bind, thresh and sack grain by machinery at a cost of one cent per 100 pounds.

"It will be our aim in the College to give practical education; to cultivate manual dexterity; to open the range of inquiry and make the scholar rely on his own resources. I have already fitted up some machine shops, and hope that the College will in some measure fill the gap opened in our system of industry by the difficulty that besets a boy who wishes to learn a mechanical art. Still that is not, by any means, the extent of our aims. I want to teach the benefits and resources of labor, to show him who has to work how to toil, that he may easiest earn his needed rest and recrea-

tion. I want to unfold the possibilities of enjoyment and show every industrious and provident man how he may secure them without the expenditure of more physical effort than is necessary for his health. There will always be some inequality; some men will be indolent, and to that extent will the burdens of the provident and industrious be increased, but even the added burden of the idle and vicious should not demand from the industrious more labor than is compatible with the highest intellectual enjoyment.

"With the increase of facilities for controlling the forces of nature, the bitter competition for wealth will be lessened. Poverty and want having been the rule instead of the exception in the past, men struggle and hoard; if all were assured of a comfortable living, and a sure competence for old age, they would spend more freely, taking more enjoyment and fight less fiercely for wealth. Not that I deprecate industry and providence, for it is the duty of man to earn and save for his family and himself; but I hope for the day when labor and thrift will no longer interfere with intellectual development and the enjoyment of social pleasures. Man's actual needs are slight; his intellectual boundless. Professor Agassiz would be satisfied with twenty-five cents' worth of food a day, but he needs steamboats to help him read the story told by the bed of the ocean, instruments to solve the riddle of the stars and glaciers, and unnumbered hands to delve amid the buried learning of the past. When he has mastered his study it belongs to the whole world, and with a proper system of education is at the command of every one.

"Co-operation is the chief hand-maid of civilization.

One man may develop a love of works of art beyond the greatest wealth of men to satisfy, but a community can spare the money to purchase the things that will give pleasure to all. San Francisco ought to have magnificent libraries, lovely parks, fine collections of pictures, splendid works of art and the means for every intellectual pleasure paid for from the public purse, and open for the enjoyment of everyone. Co-operation will bring about such social equality that no industrious man will feel himself one whit the social inferior of any man that lives, and will have no feeling but pity for the parvenu who, doubtful of his own position, fears to weaken it by association with those who have less wealth than himself."

At the opening of the University, Senator Stanford reiterated and emphasized the wishes of himself and Mrs. Stanford, as follows: "It is through education that the possible future of man is to be ascertained and attained. The Creator has not given man rational wants without the means of supplying them. He has given us an all-bountiful earth that yields inexhaustible supplies for our use. Men have only to supply their labor intelligently, and learn to control the natural forces that surround them, to have at their command all the comforts and elegances of life. Man's true happiness is to be attained, not merely by satisfying his physical wants, but in the development of his intellectual, moral and religious nature. It is through the expansion and development of these that the high standard which the Creator has made possible is to be reached, and when this standard is attained the result will be the establishment and general practice of the golden rule and the realization of the greatest happiness. I hope, therefore,

that you will ever keep before you the highest possible standard, that you will strive to attain it, and fully realize that its attainment is the object of education.

"The high condition of civilization to which man may attain in the future it is almost impossible for us to now appreciate. We can best obtain an idea of it by a comparison of our present condition with that of preceding generations. Nor have we to look very far back. A few years ago, within the memory of a majority of the adults here present—in these United States, whose very existence as a nation was justified by an inspired declaration of human inalienable rights—over four millions of human beings were held in slavery by mere might. A majority of the people of our country were at the time fully persuaded that the right to ownership of human beings existed by a law which it was bound to sustain by force if necessary.

"We believe that a wise system of education will develope a future civilization as much in advance of that of the present as ours is in advance of the condition of the savage. We may always advance toward the infinite.

"The wonderful improvements in inventions and machinery within the last fifty years, by multiplying the powers of production, have assisted greatly in the advancement of civilization. But for the invention that had done the most for education we must look back 450 years to the gigantic and ever increasing force put in motion by Guttenberg—the printing press. It has made all later inventions possible and practical. It has done more for the dissemination of education than the endowments of Harvard, Johns Hopkins

or Girard, and but for its existence I do not think I should have occasion to address you to-day.

"Once the great struggle of labor was to supply the necessities of life, now but a small portion of our people are so engaged. Food, clothing and shelter are common in our country to every provident person, excepting, of course, in occasional accidental cases. The great demand for labor is to supply what may be termed intellectual wants to which there is no limit, except that of intelligence to conceive. If all the relations and obligations of men were properly understood it would not be necessary for people to make a burden of labor. The great masses of the toilers now are compelled to perform such an amount of labor as makes life often wearisome. An intelligent system of education would correct this inequality. It would make the humblest laborer's work more valuable; it would increase both the demand and supply for skilled labor, and reduce the number of the non-producing class. It would dignify labor, and ultimately would go far to wipe out the mere distinctions of wealth and ancestry. It would achieve a bloodless revolution, and establish republican industry, merit and learning.

"We have provided in the articles of endowment that the education of the sexes shall be equal, deeming it of special importance that those who are to be the mothers of a future generation shall be fitted to mold and direct the infantile mind at its most critical period. A celebrated philosopher has said that the education received by a child in the first five years of its life was more important than all the rest; another states that in its first seven years the child received more ideas than in all its after life. How important, therefore, is

it to have mothers capable of rightly directing the young intelligence.

"We have also provided that the benefits resulting from co-operation shall be freely taught. It is through co-operation that modern progress has been mostly achieved. Co-operation societies bring forth the best capacities, the best influences of the individual for the benefit of the whole, while the good influences of the many aid the individual.

"The intelligent development of the human faculties is necessary to man's happiness, and if this be true each individual should, if possible, have such a liberal education as to enable him to understand, appreciate and enjoy the knowledge of others. We trust that the education in this institution will be of such a liberal and broad character that all connected with it will have none but the best of feelings toward other educational institutions, and particularly toward those of this State. We are all working to the same end. Let us therefore cordially co-operate. The immediate object of this institution is the personal benefit and advancement of the students, but we look beyond to the influence it will exert on the general welfare of humanity."

In his remarks at the laying of the corner-stone of the Leland Stanford Junior University at Palo Alto, the late distinguished Judge Lorenzo Sawyer, who was then President of the Board of Trustees, said in part:

"The little grove in the suburbs of Athens, which Academus presented to the Athenians, constituted the academy in which Socrates, and Plato, and their disciples, taught their pupils philosophy, rhetoric, logic, poetry, oratory, mathematics, the fine arts, and all the sciences so far as then developed. The influence

emanating from these schools, notwithstanding their limited resources, has been largely felt through all succeeding ages; and it has to this day given direction to thought, and contributed largely to mold the characters and the civil institutions of all the peoples of Europe, and their descendants in America, and wheresoever else they may be found on the face of the earth. The people of that little republic of Attica—the whole area of whose territory was only about two-thirds as large as that of the county of Santa Clara, in which our coming University is located—exercised a greater influence over the civilization, institutions, and destinies of modern nations than any other people, however great.

"The groves of Palo Alto, the tall trees, are much larger than Academus' sacred shade. These sturdy, umbrageous oaks, with Briarean arms, these stalwart, spreading laurels, and these tall eucalypti, are much grander and more imposing than the arbor-tenants of the grove at Athens. The soil of Palo Alto is far richer and more productive than that of Attica; it yields as fine wheat, as delicious figs, grapes, olives and other fruits. Its scenery is almost as grand and awe-inspiring, and quite as picturesque. Its climate is as dry, equable and delightful. The orroya de San Francisquito is as flush and turbulent in winter, if—although abundantly supplied for all purposes of the University above—as waterless in its lower reaches in summer as the two rivulets Ciphissus and Ilissus. The transparent clearness and coloring of our sky is as matchless as that of Attica, and the azure dome above our heads by day or night is as pure and as brilliant as the violet crown of Athens. All our conditions are

equally favorable to health, to physical and mental development, and to physical and mental enjoyment. Not an hour in the year is so cold as to interfere with mental or physical labor, nor an hour so hot as to render one languid, indisposed to physical or mental exertion, or as to dull the edge of thought. There is not a place in our broad land outside our own beloved State, where one can perform so much continuous physical or mental labor without weariness or irksomeness. Should the plans of the founders of the Leland Stanford Junior University be carried out in accordance with their grand conceptions, with such advantages as the location and climate afford, why should not students be attracted to its portals, not only from California, but from all the other States of our vast country, now containing 60,000,000 of people, and even from foreign lands? What should prevent this University becoming in the great future, the first in this, or any other land? When fully developed, who can estimate its influence for good upon the destinies of the human race?

"To the founders of the Leland Stanford Junior University: It is fit that the corner stone of this edifice should be laid on the anniversary of the birth of him who, while yet a mere youth, suggested the founding of a University, a suggestion upon which you have nobly acted, and to the establishment of which you have devoted so large a portion of the accumulations of a most energetic, active, and trying life. It is eminently fit that an institution founded and endowed on that suggestion should bear his name. The ways of Providence are inscrutible. Under Divine guidance his special mission on earth may have

been to wake and set in motion those slumbering sentiments and moral forces which have so grandly responded to the impetus given, by devoting so large a portion of your acquisitions, and the remainder of your lives to the realization of the object thus suggested. Yes, his mission has been nobly performed, and it is fit that both his name and the names of those who have executed his behests should be enrolled high upon the scroll of fame, and of the benefactors of the human race. You have wisely determined, during your lives, to manage and control for yourselves the funds of the foundation ; to supervise and direct the arrangement and construction of the buildings, and the required adjuncts, and to superintend and give direction to the early development and workings of the New University. This is well. He who conceives is the one to manage and control this great work, until you shall see the institution founded by your bounty firmly established on an immovable basis, enjoying a full measure of prosperity, affording the citizens of your adopted State the educational advantages contemplated, and dispensing to all the blessings and benign influences that ought to flow from such institutions. Long may you enjoy the satisfaction afforded by hopes fully realized, *seri in coelum redeatis.*

"Fellow-members of the Board of Trustees of the Leland Stanford Junior University: In accepting this grand trust you have assumed the most weighty responsibilities, not only to the founders of the University, but to the children and youth of the commonwealth, and to their posterity in all time to come. You have assumed the guardianship of the vast inherit-

ance to which they have fallen heirs. In the near future, and thenceforward till time shall be no more, the duty will devolve upon us and our successors to administer this inheritance in such manner as to accomplish its great ends.

"Should we succeed in establishing and fully developing the New University in accordance with the conception and purposes of its founders — as succeed we must with proper efforts, and proper management, and with the aid and blessing of the Omnipotent and All-wise Being, who created all things, and without whose approval we can accomplish nothing — its power for good will go on from age to age to the end of time, increasing and expanding until no corner of the earth will be beyond its humanizing, elevating, and benign influences. Invoking the Divine blessing on our work, let all put forth a united continued effort to secure a consummation so devoutly to be wished. When this shall have been done, and the Leland Stanford Junior University shall have been once securely established upon a firm and stable basis, we may exclaim with unhesitating confidence that the idea will be fully realized, *esto perpetua!*"

SENATOR GEORGE HEARST.—Among all the men who have engaged in legitimate scientific mining on the Pacific coast and, by their thoroughness and skill, added gradually to the store of knowledge on geological, chemical and metallurgical subjects, not one attained the prominence or received the universal recognition as an expert miner that was freely accorded to the late United States Senator George Hearst. His

valuable services deserve more extended mention than the limits of this history will permit. The daily acts of such men, including temporary failures, constant and courageous effort, and final success, are the lessons which are valuable to others, and the study and emulation of which are rendering Americans the envied of ambitious people the world over.

The ancestors of George Hearst were from Scotland, and settled in South Carolina anterior to the Revolutionary war. From thence his father emigrated to Missouri about the beginning of the present century, and settled in what is now Franklin county. The elder Hearst was a man possessing sterling qualities, among which were energy, industry and economy. To his first farm were added two others, until his landod possessions aggregated about eight hundred acres. Here George Hearst was born in 1820, and almost exactly when Missouri became the twenty-fourth member of the sisterhood of States. He inherited grand characteristics from both father and mother. His father was typically equipped for the requirements of pioneer life. Strong, brave and active, with a mechanical bent, he could make or mend, and was thus independent of the sources of supply and repair, which members of old communities consider necessary to existence. He was in advance of the rest of the people in his locality, and being specially progressive, continued in the front rank up to the time of his death. He was singularly largehearted, and gave much away to his neighbors, and not infrequently to his own detriment. George's mother, whose leading traits of character were largely reproduced in him, was a remarkable woman. In person she was tall and slight, and digni-

fied in manner and carriage. She was educated beyond the culture usual to her time and neighborhood, and was a thorough student, thoughtful and observant at all times. Her religious sentiments were earnest and pronounced, but utterly wanting in intolerance; for she possessed admirable self-control, and was kind, wise and deliberate and remarkably clear in judgment. She possessed unusual executive ability. It is not difficult, having this pen-picture of George's mother before us, to see her reproduced in him. His devotion to her was phenomenal, and was plainly due to the remarkable similarity of traits and characteristics shared by them.

Educational privileges were few and far between in Missouri at that time. Young Hearst had the benefit of a very common school, held in a log-cabin, for two to four months in the winter seasons. This was shared by the boys and girls of the neighborhood in a circuit of three or four miles. He made the best use of these meager advantages, and later attended a higher school, called the American Academy, for about eighteen months. With him, work and study had to go hand in hand. While he had no great purpose in life to become eminent in book learning, he yet lost no opportunity for obtaining all the information possible from that source. However, his tuition was so irregular that he never got beyond the rudiments of an English education. This deficiency threw him upon his natural resources, which were ample. All through life what he purposed to do was accomplished after his own peculiar fashion. Nothing was more difficult for him than an effort to imitate. He could not act a part. He had to be himself or nothing. His thoughts and expressions had to be his own by origin or modification,

else he was unable to utilize them. His individuality was great, and his egotism nil. He was thirty years of age before he could convince himself that he knew as much as the generality of those with whom he associated. Even then he was utterly unobtrusive, and if there was a place of prominence to be filled he preferred to push others into the lead, selecting the modest and more laborious place for himself.

During his sixteenth year George was assigned to the management of one of the three farms owned and cultivated by his father. At twenty-three the death of his father threw upon him the entire care of the estate, which was considered large at that time, but was encumbered to the extent of its value by debts assumed by the father in behalf of neighbors who had appealed to him. The family then consisted of the mother, his sister and himself. He accepted the responsibility and in a brief time, by strict economy, had saved enough to free the estate from the encumbrance.

In Washington county, Missouri, some fifteen miles from the Hearst homestead, were located galena mines long worked by the early French settlers. When young Hearst was fifteen years old, the Virginia mine, one of the most valuable properties of its kind in the world, was opened within a mile of his father's house. By frequent trips to the mines and to the smelter run by the Frenchmen, George early became proficient in the crude but effective methods pursued by these miners. When twenty years of age he operated a copper mine for himself, and with such remarkable care and economy that he was able to accumulate between five and six thousand dollars, which was greater wealth than the most prosperous farmer in the section could

realize in the same length of time. The experience gained here stood Mr. Hearst in good stead in later years; for the mining rules and methods adopted in California were generally originated and proved in the mining sections of Missouri, and not only facilitated in the formation of preliminary regulations touching the size of claims, the manner of acquiring title to them, priority of discovery, and subdivisions of deposits, etc., but helped to avoid contentions and disputes which would have resulted in delay and loss to all concerned.

When news of the discovery of gold in California reached young Hearst, it seemed to him that this was specially his El Dorado, and to it he must go or lose the opportunity of his life. He was the mainstay of the household, and the ties binding him to the society of his mother and sister were vastly stronger than usual. The separation would be only temporary, but it was very hard to bear. Mrs. Hearst had the utmost confidence in the ability of her son to succeed where any others could, and that in a pecuniary sense the venture would be greatly to his advantage. But the reason which had most influence with her was the almost positive assurance that his health, which had been greatly impaired by malaria, would be completely restored in the mountains of California. So, in the spring of 1850, he departed for California.

A detailed account of his long and wearisome journey across the plains with patient but slow going oxen would furnish material for an interesting chapter. The route taken was that which had been invaded by cholera and a virulent type of measles, and almost every mile was a shallow grave, and every rod bore evidences of helpless distress. Courage, and determination to live

for the sake of his mother enabled him to recover from an attack of cholera which would have proved fatal to one less powerfully sustained. In the Sink of the Carson some of his oxen died, but when water was finally reached, he felt that the greatest dangers and privations were behind him. He had borne up bravely and well, but at Carson river he was prostrated with a slow fever. The same undeviating will which had carried him thus far secured his recovery, and after spending his last hundred dollars for one hundred pounds of flour, he proceeded on his way over the Sierra.

The first place at which young Hearst stopped was Pleasant valley in California, about eight miles from Hangtown, a name changed many years ago for that of Placerville, which, if less suggestive, is not offensive to the ear. From Diamond springs an elevation was pointed out to him where miners were at work, and there he had his first view of mining in the new country. As a placer miner he had the experience of those who sought for gold—to-day a full purse and to-morrow poor, or vice versa.

Mr. Hearst divided his time until 1865 between placer mining and operating a quartz mill. He and his associates discovered a mine near where others had built and abandoned a mill. The one carried free gold and assayed high in value. In anticipation of making a fortune at once, they bought the mill. The lead soon gave out, however, and they were little better off than before they had made the strike. When Washoe attracted the first attention, Mr. Hearst had obtained nothing of great value from the gold fields but experience. He had obtained some gold from pla-

cer mines, and had run a mill in the reduction of ore from the Lecompton mine, which proved it a good property. His first visit to the Comstock extended over about two months. This convinced him that it was a good place to come back to, and getting together what money he could from the sale of his California property he returned at once and purchased a considerable interest in the unexplored Ophir mine. He and others who went to the Comstock were in search of gold-bearing rock, and were looking for nothing else. The ore they discovered near the surface was rich in gold, and carried also a black substance which was decidedly in their way. That was tossed aside as worthless. Later the cumbrous nuisance proved to be silver sulphurets of almost fabulous value. The Ophir was then divided into twelve shares. Mr. Hearst owned two of these. The owners worked away until they had forty-five tons of the black stuff on the dump. Hearst had concluded that the strange-looking stuff was of value, though miners generally declared it worthless. Finally he and his partners packed it on mules to Sacramento, and thence by steamers it was shipped to San Francisco. None of the local assayers or mineralogists would touch it. An Englishman named Davies offered to ship it to Swansea, and have it tested there. He demanded a round commission for his service. Finally a German chemist named Kustel proposed to build a furnace and reduce the lot for $400 a ton. To-day the same character of ores are handled by the Carson river mills for less than $5.00 per ton. The demand of the German was complied with, and the ore was reduced to bullion for $20,250, and it had cost $22,500 to convey the ore to San Francisco—$42,750. The profit of

the lot was about $80,000, and started the wonderful hegira which at once took place. That was "break of day" for the Comstock.

That summer the war with the Pyramid Lake Indians took place. It was an unnecessary and melancholy affair for the white people of central Nevada, and entailed great loss upon many, and among them was George Hearst. He was forced thereby to dispose of a part of his interest in the Ophir. For a time he retired to California, but later resumed operations on the Comstock, and continued there until 1866, the leading spirit in the district. There was no one who could so correctly estimate the character of a mine nor develop it to greater advantage than he. He had no equal in these respects. All that was of practical value regarding minerals and mineral formations he knew. In this sense his perception was so acute that it could be said of him, if it ever could be truthfully said of any one, that he was a natural mineralogist. Adding to his intuitions the lessons learned by observation and experience, he became a master miner, and was so recognized by all who were familiar with his achievements, or were capable of appreciating the combination of such instinct and acquirements in one man as made him the leader in practical mining in the United States. His maturity as a mining expert was probably reached during his connection with the Comstock; still, this was scarcely the beginning of his activity in enterprises that have formed an important part of the world's mining.

Mr. Hearst withdrew from mining on the Comstock in 1867, and for a short time was occupied in real estate transactions in San Francisco, anticipating the activity that must result from the completion of the first over-

land railroad. In this side work — for everything but mining had been incidental to him — he lost all the ready money that he had. Upon the real estate of which he retained ownership he borrowed a considerable sum of money and went down into Kern county and mined again successfully. Returning to the real estate business he retrieved his former losses in that line, and by 1869 had added largely to his wealth.

His next turn at his regular vocation was a mining enterprise in the territory of Idaho, in which, in common with other prominent Comstock mining men, he sunk a great deal of money. Another movement in mining was in the neighborhood of Salt Lake City. A telegram, couched in the superlative language peculiar to mines and mining, announced to him that the "biggest mine in the world" had been discovered, and was in need of experienced and plucky investors. Great excitement prevailed. Opinions in regard to the new find were conflicting. A man now prominent in mining in Montana, and at that time associated there in some ventures with Mr. Hearst, pronounced it worthless, but that there was a little mine in the neighborhood upon which a prospector was doing some work. Mr. Hearst went to examine the hole three or four feet deep by twice as many in length, which by courtesy was called a mine. Every day for three weeks he walked out to inspect the development work, and see how the formation held out. At the end of that time his mind was satisfied, and he purchased the prospect for $30,000, and gave $3,000 more to satisfy a greedy outside party who pretended to have some claim on it. These are the circumstances under which the marvellous development in the Ontario mine began. The ore

was rebellious. A way had to be found for separating the gold from the rock, zinc, lead and copper before the mine could become profitable. Largely owing to Mr. Hearst's faith, pluck and determination the problem was solved, and in 1890 the Ontario mine was yielding regularly a dividend to its owners of over $75,000 per month.

Mr. Hearst invested largely in the Black Hills of Dakota, and from there extended his interests to the Anaconda district in Montana, in developing which into a large, active and thriving mining community he had very much to do. The history of the Anaconda mine would warrant a somewhat lengthy and detailed study; but for the purpose in hand an outline revealing Mr. Hearst's identification with it must be sufficient. Its development opened a new page of knowledge and experience in scientific mining in the United States. For the first one hundred feet it was considered a true silver mine, but began to show copper at that depth. At the two hundred foot level it developed into a large copper vein, and is now one thousand feet deep, the vein being from thirty to forty feet thick.

Here again was an altogether new business to learn. A plant must be provided to work copper. Relying at first upon others for the scientific information supposed to be necessary for the development of the mine, various experiments were made with the representatives of foreign mineralogical schools, but all was disappointment. The self-reliant spirit of Americanism was aroused, and Mr. Hearst and his associates made up their minds to work it themselves.

In the midst of the difficulties which hemmed them in, and while they were struggling to make the prop-

erty valuable, the works were destroyed by fire, causing great loss and delay. Without a moment given up to regret or misgivings, the buildings were replaced with iron fire-proof structures on a more extended scale. At the present time the mine is in splendid running order; the reduction of the ore is proceeding satisfactorily, and the yield of the mine is enormous and profitable.

It will be observed that Mr. Hearst did not confine his operations to one or two districts or States. His enterprises carried him to widely separate points and into new and untried fields; for he had the boldness and self-confidence to apply his energies wherever his judgment led him. In this he differed from most every other great miner on the Pacific Coast. It seems contrary to their policy to distribute their energies over a wide field, and for the reason, perhaps, that they are wanting in that elasticity which characterized Mr. Hearst, and are more apt than he was to tie themselves down to a locality to which they have become accustomed. For, it would seem that in covering the immense territory that formed the field of his operations, his concentration has not been less, but rather the greater, the diversity of conditions under which he has worked proving to be a stimulus.

Mr. Hearst was called away from his important mining operations by the serious illness of his mother. The most attractive feature of his strong character was the unselfish and tender regard he always evinced for her. He devoted himself entirely to her during this last illness, doing everything that love could devise for her comfort and consolation. As she neared the end she was more than ever impressed with anxiety

because he was not mated, and she reminded him that it "was not good that man should live alone." The young woman who filled her mind as the one to make him a good and true wife was a neighbor's daughter, named for herself, Phœbe Elizabeth Apperson, a sensible and beautiful girl, of whose character and worth she was positive. It was his good fortune to act upon his mother's suggestion, which, in the fullness of time for so happy and momentous an event, resulted in his securing the prize for which he strove—"a woman whose price was far above rubies." From the day of their marriage, June 15, 1862, to the day of his death, they were one in thought, sympathy and purpose. He had told her very little as to his affairs in California, so that she allied herself to him for himself, uninfluenced by any expectation of fortune; while she was prized for her own inherent worth. Arrived in San Francisco, she found that her husband was closely identified with great interests, occupying a leading place in the affairs of the Pacific coast, of which the Metropolis was the center.

Mrs. Hearst's people were among the earliest settlers in Virginia, and connected with the oldest and most prominent, among whom were the Randolphs of Roanoke. Her grandfather was Dr. John Apperson of Abbingdon, a learned physician and an honored citizen. At twenty years of age her father went to Missouri, where his principal occupation was farming, though interested in business at Keokuk, Iowa. Her mother's family were Dutch people of means and respectability, who first settled in Charleston, South Carolina, whence they emigrated to Missouri when her mother, whose maiden name was Whitmeyer, was two

years old. There are still some of her relatives in Holland. She attended school in the neighborhood of her birthplace until she was fifteen, and then received two years tuition under a governess in the family of a friend. She was a very ambitious girl, fond of study, and devoted to her books above everything. She was a thorough student, greedy of learning, and her education has been continuous under the marvelously favorable opportunities she has enjoyed in this country and Europe. Possessing fine talent, it is not surprising that her literary attainments are superior, and that she ranks as one of the most cultured women in America.

But Mrs. Phœbe A. Hearst possesses far higher claims than these to the respect and consideration of Americans. The death of her talented husband was not only a severe affliction, but it furnished to her and the world incontestible evidence of the love, esteem and remarkable confidence in which she was held by him. All his vast estate was left to her absolutely, with the fullest power to dispose of it as she might choose. There is not a doubt that she was intimately acquainted with his inmost wishes in regard to individual and public benefactions, and that her highest ambition has been to dispense the fortune he left her wisely and lavishly—that is, to give, give and always with the single purpose of doing good to the deserving. "Uncle George" Hearst was the most open-handed, large-hearted and unquestioning almoner on the Pacific coast. The sight of him was worth a double eagle at any time to hundreds of old miners who had passed the time for handling the pick and shovel, and who were expecting soon to walk on streets of gold in the new Jerusalem. Very many of these are still the objects

of his generosity, but it is dispensed by the hand of her to whom he left all his cares and duties of this kind, certain of the fidelity with which his generous peculiarities would be continued.

For many years Mrs. Hearst has been identified with the various philanthropic interests so generously sustained by the ladies of San Francisco. She has taken special pride and pleasure in the free kindergarten schools of the city, and has charged herself with the support of several of these institutions. Her observations in these, and the consciousness that the good born there ought to be nurtured and supported for some years after the children left the kindergarten, influenced her to conceive the plan of erecting a living monument to the memory of George Hearst by instituting and richly endowing a Boys' Industrial School at Pleasanton. Before the public had learned anything of her intentions, Mrs. Hearst had visited the leading techical and industrial schools in America and Europe, and had selected those features which commended themselves to her careful judgment as best, and these will be combined in the boys' school at Pleasanton. The endowment of the school is munificent. In selecting the site, Mrs. Hearst has had in mind, not only the facility for carrying on the various branches in a technical or industrial training, but also, that while easily accessible for practical purposes, it shall be far enough away to secure the boys from the temptations which are too abundant in a great city. She hopes to give the boys gathered into this home such influence and knowledge as will help their possessors to joy and life, and such as will enlarge the bounds of their being, and encourage them to choose the good and refuse the evil.

The members of her own sex are not neglected by Mrs. Hearst. It is her purpose to found schools where girls may learn all that is necessary to make them good wives and honored mothers. In the line of benefactions already inaugurated, Mrs. Hearst has founded eight free scholarships for young women at the University of California. These scholarships give thirty dollars per month to each of eight young women to be chosen by the faculty of the University from any part of California. The great beauty and breadth of her own grand nature are shown in the requirements she makes of those accepting the scholarships:

"The qualifications necessary for any young woman receiving one of these scholarships shall be high character and noble aims, it being understood that without the assistance thus given a university education would, in each case, be impossible."

It would be remarkable if the grand qualities which commended George Hearst to the love and esteem of such a woman as Mrs. Hearst had not found favor with the public. As a fact the confidence of his fellow citizens was early attached to him, and at twenty-six years of age he was selected to represent them in the State convention of the party. That was in Missouri, where his outgoings and incomings had been observed by his neighbors. In San Francisco he was chosen by his party to represent a part of the city in the State legislature; and when General Miller was nominated by the republicans for the United States Senate, George Hearst received the unanimous vote of the democratic minority for the same place. When the place became vacant by the death of General Miller, Governor Stoneman appointed Mr. Hearst to the

vacancy, and the legislature elected him to succeed himself when that term expired. These honors were conferred upon him during his absence, and without solicitation on his part.

The course of Senator Hearst was independent and pronounced. He never permitted himself to be compromised by interested parties who might desire to promote or hamper legislation for selfish ends, but remained free to exercise his judgment, exert his influence, and cast his vote purely in the interest of his constituents and the people of the whole United States, for whom he was a representative, not alone in name, but in fact. He was always a democrat, but never a partizan. He was a democrat solely because he regarded the policy of that party as best adapted to promote the welfare of the country. He was in no sense a politician, but in every sense a patriotic statesman.

Senator Hearst occupied a place on three very important committees—those on Railroads, on Indian Affairs and on Mines and Mining. It was as a member of these committees that he did most of his work in the Senate, bringing to bear his large fund of information, and devoting his entire time and attention to the consideration of the bills referred to them, discussing, amending, and presenting them for deliberation to the Senate after painstaking and careful study. The real labor of the Senate is in the committee room, and there Senator Hearst displayed all the faithfulness, energy and good judgment which had made him successful in his private enterprises.

Beyond this, his manner, which was always dignified, considerate and polite, endeared him to those with and for whom he worked, and, above all, his constitu-

ency could depend that all matters in which they were concerned to say nothing of the general affairs of the Nation, would be carefully considered on their merits. The Senator was never a speech-maker in the ordinary sense of the term, and being a close observer, he saw that the men who said most were not those who carried the greatest weight, or who were capable of doing the most good. When the occasion came for him to express his views or to advocate needed legislation, he did so in a brief, pithy, business-like manner, and was always listened to with a deference that gave effect to his statements.

Naturally he was familiar with those economic questions that have been involved to a greater or less degree in his own experience, but his observation and study, furthermore, were such as to give him a large fund of knowledge regarding most subjects that come before the Senate for legislation. Perhaps the most important matter before Congress in the session of 1889-90 was the silver question, on which he was thoroughly at home, and spoke with remarkable clearness and cogency.

In regard to the Chinese question, which, though it may appear to be disposed of, still threatens us with international complications, it might be expected that Senator Hearst would have been prejudiced by the clamor of those who, in and out of season, rage against the Mongolians. While he saw certain valuable qualities in the Chinamen, and insisted that, being now in this country and entitled to residence, they should enjoy all the privileges guaranteed to them by our Government, he regarded them, nevertheless, as unacceptable and injurious to our people. His argument

is based upon high and rational grounds. He thought deeply, without bias, and expressed himself candidly and fearlessly.

Speaking of Mr. Hearst chiefly as a Senator, H. W. Blair, the distinguished member from New Hampshire, says: "I regard him as an admirable character, and one that will repay the most careful study. The more I see of him the better I like him. There is a great deal of good nature, actual nobility, in him—that which is, I think, what some people call personal magnetism, for the want of a better name, which causes me to both enjoy his society and admire the man. And I am not alone in entertaining this view of him; in fact, I never have known a Senator who so enjoyed the universal respect and confidence of the members, his colleagues, as does Senator Hearst. He understands himself perfectly; is modest; has a remarkable fund of good sense; is independent; but always courteous and affable. Coming, as he did, without the professional or literary training, which is ordinarily supposed to fit men for the National Legislature, it is interesting to note that he finds himself at home and among friends at once. What he may lack in knowledge of books, he supplies by his native force of intellect. In fact, he grasps the principles of great national questions as readily, and as thoroughly, as any legislator I ever knew."

And thus speaks C. K. Davis, Senator from Minnesota, who, like Mr. Blair, was opposed to Mr. Hearst in politics: "I obtained my first insight into the character of Senator Hearst early in 1888, in the sessions of the Senate select committee upon the adjustment of the debts of the Pacific railroads to the

United States. The subjects involved are, as every one knows, of the utmost complexity of fact and laws; comprehending figures which reach to scores of millions of dollars; events which have been in transaction for nearly thirty years; the actions of men living and of men dead; censure and praise in the same persons; the establishment of civilization over the middle third of our country, and the consolidation of the east, the Mississippi valley and the Pacific territory by those iron bands of railroad track which are stronger than any political contrivance. He, with characteristic reserve, had said little. I had no personal knowledge of, and never had any connection with the questions under consideration, and was, of course, in need of information. Naturally enough, I addressed some inquiries to him. I found that he was completely informed.

"This did not surprise me, for I knew that in his personal experience was comprehended much of the history of this country west of the Rocky mountains. But I found, in addition, such soundness of judgment, such just conceptions of right and wrong, and such argumentative power of clear, yet condensed, statement, such knowledge of human nature, such consideration for its infirmities, such regard for its better traits, and such contempt for its meanness, that I was greatly attracted to him. Since then I have yielded to this attraction on every occasion. He is, in many respects, the most interesting man I have ever known.

"I was struck with his absolute fairness. Affection and dislikes do not disturb his judgment. He speaks the truth; what he knows is to him a certainty, and he states it without reservation. He

is typical of a vanishing class of men, the pioneers to whom nature is very near because they, natural and unconventional, have been obliged to interrogate her and to confide in her. His perceptive faculties are of a very high order. He glances and sees where others gaze until they are blinded. His judgment follows quickly, and it must be one of great accuracy, for he owes to it his remarkable success in life.

"These are qualities to admire. There are others which excite a higher regard. These are his charitable construction of motives and acts of others; his abstinence from disparagement of other men; his judicious generosity; his immediate defense of any friend when attacked; his intuitive detection of frauds and shams; his scorn of phariseeism, and his recognition of merit.

"Education—using the word in the popular sense—has done little for him, but I have never met a man for whom this deprivation has done more. Thrown upon his own resources, he has derived from long years of observation and experience a fund of lore which books could not have taught him.

"Mr. Hearst was a representative of the people, whose confidence he acquired and held through many years in his wide relation with them as a private citizen, and whose trust in him was confirmed by his faithful discharge of duty toward them as a public servant in an office which is next to the highest that they have within their gift."

Shortly after Mr. Hearst's re-election to the United States Senate, his health gave signs of failing, and by the latter part of 1890 his condition caused the gravest alarm. All that skill and affection could do for him failed to arrest the progress of disease, and in February,

1891, he passed away, leaving a place in the hearts of the people and a record that few men have so honestly earned.

HON. JAMES G. FAIR.—The grand achievements of this successful miner, statesman and financier are so intimately interwoven with the progress of California, and have had and are still having such marked influence upon her material interests, that a history of the Golden State from which a notice of his work was absent would lack the very essence of truthfulness. Furthermore, in no other way can useful lessons become of such practical good as when the actor is brought prominently before the mind of the youthful aspirant for an honorable career among men. For that reason, and because James G. Fair has earned far more than we can say in his behalf, we briefly trace his busy life.

Before our Revolutionary war so many of the sturdy and honest natives of northern Ireland left for the American Colonies as greatly to disturb thoughtful English statesmen. Indeed, there has been no time since when comparatively as great a number have come to this country, and they exercised a most powerful influence upon the laws and genius of the government formed soon thereafter. James G. Fair was born in the north of Ireland near the close of 1831, and could trace his lineage to some of the noted families of both Ireland and Scotland. He is therefore strictly Scotch-Irish. He had few educational advantages before his parents brought him to the United States, and gave him the benefit of the public school at Geneva, Ill.

Later, he took a thorough course in one of the business colleges at Chicago. When only sixteen years old he was depending absolutely on his own resources, and was backed by no interest but his native worth and a firm determination to succeed.

In 1849, when less than eighteen years of age, he was placer mining on the Feather river, having crossed the plains the spring of that year. It must be remembered that the cream of the "golden placers" had been fairly well recovered at an early date after the discovery, and that after the end of 1850-51 success with pan, rocker or long-Tom was more a matter of luck than science. Nearly all the rich diggings had been depleted of metal, and even that early very many of the Argonauts—those who had been very successful or utterly disappointed—had returned home or gone where new diggings were reported. A change was taking place in the methods of obtaining gold. Attention was turned to quartz mining, and to the hidden treasures in the deep beds of ancient rivers. Very little capital was needed to work a rich placer successfully. It required a great deal of coin to successfully handle a quartz mine, or recover the buried riches from the cemented gravels in the lost rivers. It also required an amount of practical and scientific knowledge possessed by none of those who first came to California, and was slowly acquired in the rough school of experience by a very few. Mr Fair absorbed the very knowledge required with such rapidity as to make it seem that he became an expert by intuition. His first experience in quartz mining was obtained in his own mine in Calaveras county, and from the beginning he was accorded first place as a safe and reliable

authority. The only mistake made in regard to him was in the assumption that he derived any knowledge intuitively. Every scrap of useful information was obtained by work—by careful and laborious study by day, and continued long after others slept. His wonderful memory was his main helper, and a fact once discovered remained on call to be used instantly whenever and wherever needed.

During this period of invaluable schooling, Mr. Fair was accumulating capital, without which acquirements, however superior, generally prove barren of results. It was not long before his intelligent services were in demand in Nevada, where a large amount of gold and silver had been recovered from the gravel and quartz. He took charge there with well-defined opinions, to prove the correctness of which would entail the expenditure of large sums of money. If he had not been well supplied with means of his own, it is not doubtful that his belief in the value of deep mining would have remained an undeveloped theory. Fortunately he could back his opinions with coin from his own pocket, and others were more willing to follow the lead of a man so situated than they would have been to spend their own money on the suspicion that their superintendent might possibly be correct. Mr. Fair had his way, and the very bowels of the "everlasting hills" were invaded, resulting in the addition of several hundred millions of the precious metals to the wealth of the world, none of which would have been recovered in our day but for the knowledge and courage of James G. Fair. The mines in the Comstock district have produced four hundred million dollars worth of metal, nearly one-half of which, or 46.83 per cent., has been

gold. Thus it will be seen that Nevada is not an exclusively "Silver State."

The State of Nevada did itself credit in selecting James G. Fair to represent the important interests of the entire Pacific coast, and that young and vigorous State more especially, in the Senate of the United States. Notwithstanding the immensity of his interests, and the constant care with which he had nurtured them, Senator Fair took high rank as a careful statesman, highly popular with the best and ablest men in the Senate, and for six years filled the position most creditably. That he is not still a member of the august body is no fault of the people of Nevada. It is simply because he could not properly perform the duties of the high office without utterly sacrificing interests immensely important to every section of the Pacific coast, and indirectly to the whole country.

Among the vast enterprises which owe their inception and prosperous condition to Senator Fair the Nevada Bank deserves notice. The standing of this great financial institution is first-class among moneyed men the world over. Some time after the bank had become a power in financial centers, Mr. Fair withdrew from its active management. Later it became involved because of speculations foreign to the intentions of its originators, and its doors were temporarily closed with liabilities of about $14,000,000, and assets which might be made available after a time to the extent of possibly one-half that sum. The permanent failure of the bank meant utter ruin to many innocent depositors, and an almost certain panic which would spread disaster to every business enterprise on the coast. The unfortunate condition of the Nevada bank was due to no act of

omission or commission of Senator Fair. Yet he threw himself and his immense wealth into the breach, and for nineteen months lived almost continuously inside the bank walls. As soon as it became known that his master hand was at the helm unquestioned confidence was restored, and his financial skill and resources soon had the Nevada bank in as proud a position as it had ever occupied.

Another important work of Senator Fair was the construction of the South Pacific Railroad, running from San Francisco to Santa Cruz. It proved of great benefit to the ranchers along the route, and was, in effect, a competitor of the Southern Pacific Company for a very important trade. That corporation finally purchased the productive line for $7,000,000, which gave the Senator a good profit.

We might continue for pages to name important industrial enterprises which Senator Fair is assisting with his millions. It is very much to the credit of his ability that his investments are made with such rare care that he seldom has to enter any sum to "profit and loss." A failing venture would do injury to the coast in a degree, but a brilliant success induces other capitalists to have courage to do likewise. Senator Fair has no idle capital. His great investments in real estate are to the end that the land may be improved, giving employment to thousands. So many who became wealthy here have seen fit to go east or to Europe to spend their money, that the course of Senator Fair becames doubly patriotic and commendable. On the Pacific coast he accumulated his millions, and among this people he is investing it, and thus adding to the prosperity of all. No wonder that he is popular.

The visitor to the Pacific coast is not slow in recognizing the fact that a large proportion of those who have become prominent, either for wealth, enterprise or philanthropy, are of Irish, Scotch or Scotch-Irish origin. They find the finest buildings in the city bearing names which carry an odor of the shamrock and thistle—the "Murphy," "Flood," "Donahue," "Phelan" and many others. Among the great capitalists they hear of Fair, Phelan, Montgomery, McDonald, O'Brien, Mackey and a hundred others whose names have a distinct perfume from the downs or braes or a combination of both. But, as a fact, this state of things is not peculiar to California and the Pacific coast. Since long before Patrick Henry threw down the gage to wrong, every grand and noble proposition has been suggested or warmly supported by the Scotch-Irish. In law, theology, education, science, medicine, the legislature and philanthropy, the men of Scotch-Irish blood have been first. Nothing in our national history would be of much worth if shorn of the achievements of those of Irish and Scotch origin. Grandly stand out the names of Jackson, Grant, Lee, Logan, Forest, McPherson, Johnson and Sheridan, overtopping all others in history by a full head. And we detract nothing from their brilliancy by naming Senator Fair as an honorable and successful exemplar of their grandest characteristics. He has been a persistent worker all his life, and will continue thus to the end. Notwithstanding the fact that no man in his employ is expected to devote as many hours to his service as he gives, his appearance now proves two things: Constant employment need not age one and temperate habits increase the ability to toil.

Within a short time Senator Fair has been greatly bereaved. Scarcely had the large numbers who were pensioners on the generous bounty of Mrs. Fair ceased to mourn her decease, when James G. Fair, Jr., just come to vigorous manhood, was taken from a life of hope and usefulness. The loss was a heavy affliction to Senator Fair, and grievously disarranged plans which Nevada friends had formed for obtaining the intellectual help of young Fair whenever he chose to accept a seat in Congress. One son, Charles L. Fair, and two daughters are left, the oldest of whom is happily married to Herman Oelrichs, of New York.

It would be impossible to give any correct estimate of the charities dispensed by Senator Fair. We doubt whether he has any idea of the amount he gives away to those he deems deserving. One of the severest penalties attaching to the known possessors of great wealth is the certainty that they will be deluged with begging letters, and soiled hands will be thrust in their way at every turn by persons too lazy to work and none too proud to beg. Senator Fair has had his share of these afflictions; but we know of many cases where the weak have been piloted over rough places by his beneficence, and no record has been kept by him, either of the opportune gift, or the kindly manner in which it was tendered. We have no doubt, however, that Senator Fair will eventually find that all this multitude of kindnesses, though altogether forgotten by him, has been registered by the painstaking hand of God in characters of eternal beauty. And in the present, nothing can be more gratifying to Senator Fair than the respectful and affectionate manner in which he is mentioned by all classes and all ages. On

the Pacific coast every old citizen is proud to meet "Uncle Jimmie Fair."

HON. GUILFORD WILEY WELLS.—In giving a brief sketch of the senior member of the eminent law firm of Wells, Monroe & Lee, of Los Angeles, the California Gold Book departs somewhat from its policy; but its readers will recognize the appropriateness of that departure, as the object is to present a fair record of the facts which illustrate the great progress taking place in California and the instrumentalities in use.

G. Wiley Wells was born February 18th, 1844, and numbers among his ancestors the most prominent people in Central New York, where culture and refinement has been in its zenith for more than half a century, and where some of the greatest men America has produced first saw the light, and received their training.

When the War of the Rebellion was precipitated upon the country, young Wells was in college, and nearing the time of his graduation. The call to the rescue of the Nation found him ready, and in May, 1861, he was at the front and in the thickest of the contest. His ability and gallantry took him from the ranks in a very short time, and he became one of Gen. Phil. Sheridan's most trusted officers. Twice he was wounded, the last time so severely as to permanently disable him, and twice he was breveted for gallantry on the field of battle, and the last time promoted to the rank of colonel. This last wound was so near the close of active operations that the war was at an end by the time his wounds had begun to heal.

As soon as able to pursue his studies, Colonel Wells entered the law department of Columbia University, Washington City, graduating from thence with high honors. From there he removed to Mississippi, settling at Holly Springs. In 1870 he was appointed district attorney for the Northern District of Mississippi, by President Grant, who never made a mistake where he personally selected an official. Colonel Wells occupied this position when the Kuklux Klan came into being, and had to prosecute a great many of these desperate men under the Kuklux act of Congress. He drew the first indictment framed under that law which held, and which received the endorsement of United States courts in the South, and was pronounced sound by the Supreme Court of the United States, on appeals of cases which were carried to that tribunal of last resort.

During the years in which Colonel Wells was the prosecuting officer of the Government he obtained about 2,200 convictions, and had arrayed against him the most powerful and influential bar in the United States, of which the late Justice Lamar was a member.

In 1876, Colonel Wells was sent to Congress from the Second District of Mississippi. The impartiality and justice of his official course in Mississippi was thereby endorsed in a most remarkable manner, he receiving the votes of nine out of ten of the men he had prosecuted, and their influential relations and friends, and that, too, without retracting a single sentiment promulgated by him as an active and aggressive member of the republican party.

In 1877 Colonel Wells was appointed consul general to China. There it became his duty to investigate the official conduct of his predecessor. His findings in the

case created an antagonism from a powerful coterie at the Capitol, and facts and testimony in the case were suppressed. On learning this Colonel Wells telegraphed his peremptory resignation on January 10, 1878, and as soon thereafter as the affairs of the important position could be transferred to a responsible representative of the State Department, Colonel Wells returned to the United States, taking up his residence at Los Angeles. Later Congress investigated this whole question, and gave its emphatic endorsement to the acts of Colonel Wells, and its signal approval to all he had done.

Colonel Wells has been a part of the grand progress of Los Angeles and southern California, and an important factor in producing it. Almost the entire material growth of Los Angeles and the surrounding country has taken place since his residence there. His individuality is great, and his wonderful influence is stamped upon any community with which his lot is cast. His reputation as a Christian statesman and an able lawyer is as wide as the country, and those who know him recognize the claims of a country in which he would be willing to live as necessarily superior, and they are immediately attracted to its investigation. Many of the best citizens of Los Angeles were first induced to visit that place because Colonel Wells had chosen it for his home. He is prominent in every enterprise having for its object the improvement of the community. Great-hearted and generous, and wonderfully equipped in the principles of his profession, his law firm has enjoyed the cream of the practice in California, and frequently has cases which he has to prosecute before the Supreme Courts of the State and of the United States. Being in the prime of his manhood, Colonel Wells will remain a

power for good for many years to come, and a permanent benefit to the great State of California.

HON. A. T. HATCH.—For the purposes of the California Gold Book it is not necessary to trace the life story of this great horticulturist back of the year 1871, when he came to realize something of the great profit there was in fruit-growing, from selling the pears from three trees for more than he could have obtained from three acres planted to wheat or barley—that is, the net profit was greater. Since his birth at Elkhart, Indiana, in 1837, the career of the boy had indicated what the man would be, and what he developed to be during his labors in the mines. The results of the latter had enabled him to purchase a wheat ranch in the Suisun valley, Solano county. On it were three pear trees, planted by some former resident. These produced bountifully every year, and during the first season Mr. Hatch obtained possession the sales from them changed the plans of this industrious and energetic men, and added millions to the productive capacity of the State of California, and the northern portion more especially.

Right then Mr. Hatch determined to risk his fortunes on the cultivation of fruit. If he had been a millionaire every dollar of his capital would have been planted beneath the roots of young trees from the nursery. As it was, he planted all he possibly could, only to be laughed at by his wheat-growing neighbors. It was not until 1875 that he had planted all of the 120 acres adapted to fruit in his original purchase. Then he began to study the habits of trees, and the

character and constituents of soils. He was after information, and was specially proud to come in possession of a new fact, regardless of the source, or the seeming insignificance of what he was learning. His anxiety to know what experience had taught others resulted in the organization of the State Horticultural Society in 1879, and of that he has been the most active member, and vice-president continuously.

About this time the trees first planted by him began to produce. His inspirations were verified, and he commenced reaching out for other fields to conquer. In 1882 he bought the Ellsworth ranch, containing 217 acres. Three years later he was in possession of the Turner place of 237 acres, and the Switzer tract of 80 acres, and the next year he had added the Peabody farm of 127 acres. These gave him an immense place, and all in one body. That is his home orchard, and is the finest and most productive piece of property in the State. It is not all in fruit. In 1872 he had planted 300 Languedoc almond trees as an experiment. When four years old they gave a net return of $187 per acre. That was satisfactory. From thence he began to plan for new varieties, and has originated the "*IXL*," "*Ne Plus Ultra*," "*Nonpareil*," "*El Supremo*," and many others (192 varieties in 1886); but those named are of such extraordinary excellence that Mr. Hatch had planted 203 acres more to these varieties before 1888. He is now the recognized authority on almonds—the soil adapted to their most vigorous growth, the kinds to plant, the distance apart, and all other facts which will enhance results.

Mr. Hatch has made use of the information he gained in regard to soils, and their effect upon the size

and flavor of different kinds of fruits, nuts and vines. He has lands in Alameda, San Joaquin, Contra Costa, Placer, Butte, and other counties, and is able to prove his theories by the finest samples of products from each locality. He has been a real pioneer missionary in many of the neighborhoods he has invaded; but their residents were speedily converted, for by the adoption of his ideas they see immense profits coming their way, and at the same time the ratio of hard work becoming very much smaller. He has been an educator whose lessons have made life easier to the ranchers, and at the same time doubled up the productive value of the ranches many times over.

In addition to building up his own property, Mr. Hatch always finds time for important public services. He first suggested in the State Horticultural Society the discussion which resulted in the organization of the California Fruit Union, which he served two years as president, declining re-election in 1888. His faith in California as a field for enterprise and the need of drawing hither a larger population to furnish the workers now imperatively demanded by our fruit growers, induced Mr. Hatch to take a leading part in the organization of the State Board of Trade in 1887, of which he accepted the presidency. Its objects is to make California better known, and thus to attract desirable immigration. He is California's Commissioner of Horticulture to the World's Fair, and has been indefatigable in his efforts to make the fruit display creditable to the State.

If ever any public-spirited citizen found his wife a "helpmeet" from God, Mr. Hatch made that acquisition in the woman he married east in 1860. She has

been the intimate sharer of every vicissitude in his career up to this time, and can claim a right to enjoy an interest in the princely income of more than $100,000 a year from the home place, and all that comes from the other ventures where she has heartily approved the risks taken. All the honor which should attach to the expensive efforts of Mr. Hatch to introduce California fruits into England must be divided with her, for in support of every enterprise undertaken by him she has accorded an earnest "Amen."

CLAUS SPRECKELS.—Among the great manufacturing and commercial firms, which are representative of the wealth, enterprise and business integrity of San Francisco merchants, the house founded by Claus Spreckels admittedly stands foremost. The history of sugar refining on the Pacific coast is practically a record of the genius and achievements of this remarkable man; while the house flag of the great shipping and commission firm of J. D. Spreckels & Bros., now an incorporated company, is known and respected in the principal ports of the world.

Claus Spreckels was born at Lamstedt, Hanover, in 1828. At the early age of eighteen he emigrated to America, locating at Charleston, South Carolina, where he became identified with the grocery trade. Before he had attained his majority he was conducting a general grocery business on his own account. He married early in life and his oldest son, John D. Spreckels, the well-known merchant, was born at Charleston. Although successful in trade at Charles-

ton, the field of enterprise was too narrow for his ambition, and in 1855 he sold out his business and established himself in the same line at New York, where he prospered. But fortunately for San Francisco, Claus Spreckels' thoughts were soon turned in this direction, through the statement of his brother, who was in business here. He determined to go to the Pacific coast, promptly sold out his New York establishment, and started for the Golden Gate, where he arrived in July, 1856, by the steamer "John L. Stevens," from Panama. Here Claus Spreckels' life work practically began; and here, despite a few years of signal achievement in Philadelphia, Pa., it will probably end.

In 1856 Claus Spreckels is found conducting a grocery business in San Francisco; but this was too slow for his restless energy and ambition, and in 1857 he established the Albany brewery, managing both with his proverbial success. The brewing business, however, expanded so rapidly that he was ultimately forced to devote his entire attention to it, and he thereupon sold out his store and withdrew finally from the grocery trade. He introduced many improvements in the process of brewing, and had the satisfaction of making money in a business where others had failed. But he saw that there were larger opportunities in another field of manufacture, and in 1863 he sold out his interest in the Albany brewery to go into the sugar refining business.

This was a bold venture on the part of the young merchant, because the field was then fully occupied by men possessing large capital and resources; but he had unbounded confidence in his own ability to overcome

all obstacles, and as he had developed very considerable inventive skill in his brewing enterprise, he knew that he could so simplify the process of sugar refining as to more than offset the advantages of his established rivals. He found others also who had equal faith in him, and in 1863, Claus Spreckels established the Bay Sugar Refinery at the corner of Battery and Union streets, San Francisco, and he became president and manager of the company.

He visited New York on behalf of this enterprise, and after the most careful inspection of the refineries there, selected machinery for the Bay Sugar Refinery and shipped it to San Francisco. The result justified his forethought and skill, and when in 1866 he sold out his interest in the refinery to proceed to Europe and make a further study of sugar manufacture, he left a prosperous concern, and took with him a very substantial fortune.

While in Europe Mr. Spreckels made a thorough study of the beet sugar industry of Germany, even entering one of the factories at Magdeburg as a workman to familiarize himself with the practical details. The result of his investigation demonstrated that it would not pay to establish beet sugar factories in California owing to the high price of labor there. If the conditions of manufacture had been favorable then as they are now, California would have had the beet sugar industry established a score of years before it has been by Mr. Spreckels. But having satisfied himself upon that vital point, he at once turned his mind to the practical detail of simplifying the processes of sugar refining in America, where there was an ever increasing demand. Accordingly he returned to New

York, where he spent months elaborating his ideas and making costly experiments with new machinery. He ordered a new plant built, embodying all his improvements, and in 1867 founded the California Sugar Refinery at the corner of Eighth and Brannan streets, San Francisco, of which he was the sole owner and manager. This enterprise was a success from the start, as the sugar was superior to any other product on the market. It soon became necessary to enlarge the works, and two refineries were built, one in 1868, the other in 1878, to take the place of the wooden structure in which the original start had been made. The daily capacity of the California Sugar Refinery at this time was 255,000 pounds of refined sugar, and it employed a working force of 250 men.

It was during this period that Mr. Spreckels invented and brought into operation the processes of making hard and cube sugar direct from the centrifugals, and their introduction put him beyond competition. The old process took six days to perfect; by his invention the process was complete in twenty-four hours. From this point in his career Claus Spreckels was without a serious rival in his special line of manufacture, and he was known henceforth as "the Sugar King."

Meantime the Reciprocity Treaty with Hawaii went into operation, and although Claus Spreckels had opposed its ratification he was not slow to avail himself of its commercial advantages as providing a near-by supply of raw sugar. Accordingly he visited the islands in the mail steamer which took down the news of the ratification of the treaty in 1876, and made a contract with the planters for all their sugar for a term of years. He thus had the entire control of Hawaiian

sugar in addition to access to the open markets of the world, and it soon became necessary to enlarge the capacity of his refinery, the sugar from which found ready sale as far east as the Missouri river. Ten acres of land on the Potrero, South San Francisco, having a deep water frontage to the Bay, were bought, and the foundation stone of the present refinery was laid May 28, 1881. This is one of the most complete, as it is also one of the largest, sugar refineries in the world, and has earned its enterprising founder both fame and fortune. It is constructed of the most durable material, only brick and iron being used in the several buildings. The filter-house is twelve stories high; other buildings in the works are ten stories. The walls taper from three feet at the base, to sixteen inches at the top, and form a landmark on the Bay. Over seven million bricks were used in their construction. There are three main structures, having a frontage to the Bay of about 400 feet. The entire plant is lighted by electricity. Every mechanical device for economizing labor and perfecting the refining process is in use in this great refinery. The barrel factory is outside the refinery. The laboratory, machine shop, warehouse and wharves are in keeping with the general plan and requirements of this establishment, which was completed and in operation in January, 1883, at a cost of about $2,000,000. The ship and railroad car meet at the spacious wharves of the California Refinery on the Potrero. The daily capacity is equal to about 1,500,000 pounds, and it employs over 600 men, not to speak of the army of skilled labor for which it makes employment in dependent industries.

At this point it may be well to refer briefly to the

development of the sugar industry on the Hawaiian Islands consequent upon Mr. Spreckels' identification with that country, and which has been of such vast benefit to the trade and commerce of San Francisco and the entire Pacific coast. During 1876, the first Hawaiian treaty year, the total foreign trade of the islands was $4,052,811; during 1890, the last year in which the islands enjoyed the special advantages of the treaty in the sugar product, the total value of exports and imports were $19,985,505, and this enormous development in fourteen years is almost exclusively to be credited to the enterprise of Claus Spreckels, who invested not less than $5,000,000 on the islands in permanent improvements, irrigating canals, railroad, mills, etc., besides establishing a first-class steamship service and freight line between San Francisco and Honolulu. The sugar export from the islands in 1876 aggregated 26,072,429 pounds; and in 1890 it aggregated 259,798,462 pounds, whilst in 1891, 274,983,580 pounds of sugar were exported to San Francisco and handled at the California Sugar Refinery. Mr. Spreckels owns the largest sugar plantation in the world. It is located on the Island of Maui, one of the Hawaiian group; he also owns other plantations on these islands which yield one-half of the total output of sugar, and has a contract with the planters for the other half of the product for a long term of years. Ninety per cent. of the Hawaiian trade is with the United States, and practically it may be said with San Francisco.

The business enterprise of Claus Spreckels by sea and land built up American industries and developed American trade and commerce. American tonnage

(either on the American register or built on the Pacific coast for Hawaiian owners) has been used almost exclusively in the Hawaiian trade since 1876. There have been built on the Pacific coast, mainly at San Francisco, for the Hawaiian trade since the reciprocity treaty went into operation, twenty-one sailing vessels, with an aggregate of about 8,000 tons, and for the inter-island trade, on the Hawaiian register, twenty-three sailing and fourteen steam vessels. The total cost was about $2,000,000, of which total 50 per cent. was for wages. In addition to this John D. Spreckels & Bros. built at San Francisco five of their steamtug fleet; the latest addition, the "Fearless," being the largest, best-equipped and most powerful tug in the world, constructed entirely of steel at the Union Iron Works. These tugs cost over $250,000. In addition to these San Francisco built tugs, Messrs. Spreckels also built the ocean-going steamships Alameda and Mariposa, employed on the Australian mail service, at a cost of $1,000,000, at Cramp & Sons' ship-yard, Philadelphia; also the steamship Kinau, for the inter-island trade, and one steamtug at Messrs. Cramps' yard, at a total cost of $360,000; bought two first-class Clyde-built ocean-going steamships at a cost of $500,000 for the Australian and Hawaiian trade, one of which is now under the Hawaiian flag; built a 700 ton steamship at Glasgow for the inter-islands trade, besides building a steamtug at San Francisco for services at Honolulu. The annual expenditure for wages at San Francisco in shipping employed almost exclusively in the Hawaiian trade, exceeds $500,000; the additional outlay for supplies is also very large. The capital invested in building and equipping steam

and sailing vessels for this trade has been at least $4,000,000. This expenditure has been made in large part by Mr. Spreckels and the commercial enterprises with which he is identified and controls, and is perhaps unequaled in the history of commercial development in any part of the world as the work of one man.

Returning to the sugar enterprises of the Sugar King, we find this gentleman visiting Europe in 1887 to again investigate the beet sugar business. His investigation was thorough, including every detail from the field to the factory. He shipped several tons of sugar beet seed to California, which was distributed free, and experimental plantings were made in various districts. Being satisfied with the results of these experiments, Mr. Spreckels bought a beet sugar plant in Germany, embodying the latest processes of manufacture, and erected it at Watsonville, Santa Cruz county, having organized the Western Beet Sugar Company. It was started on October 20, 1888, and was so successful that its capacity was doubled in 1892. This factory made about 6,000 tons of beet sugar in the campaign of 1892, and has been the means of enriching the farmers of the fertile Pajaro and Salinas valleys, by making a certain market for a new agricultural product, which nets them an average of $50 per acre, and is capable of indefinite expansion. This practical experiment demonstrated the fact that beet sugar could be produced on a large scale in California under favorable fiscal conditions, despite the high price of land, labor and money; and when the sugar duty was repealed by the McKinley tariff, was the cause of inducing Congress to provide for the payment of an equivalent bounty on the home product. The beet

sugar industry of the United States, as well as the cane sugar industry of the South, owed this to Claus Spreckels.

But this remarkable man found, after the first year's trial, that he could not depend entirely upon the farmers for the necessary supply of beets, and he leased a large ranch in the neighborhood of Watsonville, upon which he planted and harvested 1,200 acres of sugar beets in the season of 1892. Another material drawback was the cost of transportation of beets and fuel to the factory, and of the sugar to San Francisco for refining. The Watsonville factory was heavily handicapped by the freight rates of the Southern Pacific railroad, and frequently the farmers could not get their beets shipped to the factory for weeks at a time. Mr. Spreckels determined to change these conditions. With his proverbial energy he organized the Pajaro Valley Railroad Company, secured a deepwater shipping point at Moss Landing, and built and equipped twenty-five miles of narrow gauge steel railroad, with side tracks over his Morocojo ranch. This railroad enables all the farmers in Pajaro and Salinas valleys to ship their beets to the factory, and gives them an outlet to a shipping point on the coast for their wheat and other produce, thus saving the long and expensive haul to San Francisco by the Southern Pacific. These joint enterprises called for an expenditure of close on $2,000,000 by Mr. Spreckels; and the effect has been to enrich the district, and establish on a firm basis a great national industry. The Watsonville Beet Sugar Factory is the foundation and cause of the beet sugar industry of the United States, and Claus Spreckels was its founder and exponent. The Watsonville Beet Sugar

Factory is the best equipped enterprise of the kind in the world, as Mr. Spreckels has added several important improvements in the sugar making process; and the farm operations in planting and harvesting the beets on his great ranch have been rendered almost perfect by the use of labor saving machinery, several of the most useful being originated on the spot. In all about 14,000 tons of beet sugar have been made at Watsonville since the factory started. Claus Spreckels, in 1889, organized the Occidental Beet Sugar Company, with a capital of $5,000,000, of which he and his son, John D. Spreckels, subscribed $2,500,000; but owing to the great industrial struggle in which he was then engaged with the sugar trust, no active work was done by this organization, and since his victory over the trust in 1892, and return to California, he has contented himself with doubling the capacity of the Watsonville factory and promoting beet culture.

Perhaps the most notable enterprise Claus Spreckels ever engaged in was his fight against the sugar trust, because it involved an industrial and financial campaign against the combined and organized sugar interests of the United States outside of San Francisco, and fixed the attention of the commercial world for years. The sugar trust was organized in 1887, with a capital of $50,000,000, and when Claus Spreckels refused to join the monopoly and surrender control of his own business, the trust bought the American Sugar Refinery at San Francisco from certain Hawaiian planters, who began operating it with their own sugar on his refusal to contract to buy it, and started a war upon the California Sugar Refinery at its headquarters. This was in 1887-88. The challenge was accepted by

Mr. Spreckels, who proceeded to the East, and after carefully studying the situation, bought a site on the Delaware river at Philadelphia, and there built the largest and most complete sugar refinery in the world. The corner-stone was laid on the 29th of October, 1888, and the great refinery was ready for operation in thirteen months. Considering the magnitude of the work, and the fact that the factory and wharves were capable of accommodating twelve of the largest ocean-going vessels at one time, and that they were erected on made ground, it was a feat in building which has never been approached, either before or since, in the United States or elsewhere. Nine acres of ground were covered by the Spreckels refinery at Philadelphia, consisting of twelve enormous buildings, ten and twelve stories high; and on the 10th of December, 1889, Claus Spreckels, the Sugar King, opened the campaign against the sugar trust in the East, and continued the war until 1892, when the trust capitulated, buying out his Eastern interests and leaving him in undisputed possession of the territory west of the Missouri river. The construction of the machinery for the Philadelphia refinery and the building was superintended by Mr. Spreckels personally, and one or the other of his sons. The cost of this great enterprise involved an outlay of $5,000,000, which fact demonstrates the vast resources of "the Sugar King," when the enormous sums invested in his other enterprises by land and sea, in California and on the Hawaiian islands, are considered. It is only necessary to add that meanwhile the American refinery of the trust had been absorbed by the California Refinery Company, and that the Western Refinery Company was organized

after the amalgamation. The California Sugar Refinery, built, organized and managed by Claus Spreckels, occupies the field exclusively under its new name on the Pacific coast and as far east as the Missouri river, and has the absolute control of all the sugar product of the Hawaiian islands.

It now remains to note the great commercial firm of J. D. Spreckels & Bros., which was founded in 1880 to transact a general shipping and commission business, and became incorporated in 1891. This firm, which is now the leading mercantile house on the Pacific coast, began its shipping enterprise with a two hundred ton schooner. Other sailing vessels were soon added to the pioneer craft, and in 1881 the Oceanic Steamship Company was organized with Mr. John D. Spreckels as president, Mr. A. B. Spreckels, treasurer, and the firm of J. D. Spreckels & Bros. as general agents. They at once set to work to develop Hawaiian trade, as their distinguished father had aleady set about developing its sugar industry. Orders were given to Cramp & Sons, Philadelphia, to build two three thousand ton iron steamships for the island trade, and without loss of time the "Mariposa" and the "Alameda" were built and put in commission. Meanwhile two steamships were chartered by the firm, and a fortnightly service to Honolulu was established. At this time the Pacific Mail steamers were performing the Australian mail service, and an arrangement between the two companies was come to regarding the Honolulu trade which was mutually satisfactory.

This state of things continued until 1885, when the Pacific Mail Company withdrew from the Australian route, and the Oceanic Company took it up. It had

serious opposition, however, on the route, as Sir Wm. Pearce, the wealthy English shipbuilder and owner of the "Zealandia" and "Australia," which had been employed under the Pacific Mail contract continued to run his ships between San Francisco and Australia, touching at Honolulu and Auckland. Claus Spreckels saw that this opposition must be got rid of in the interest of the Oceanic Company. Accordingly he bought the steamships from Sir. Wm. Pearce by telegraph for $500,000, and expended about $350,000 additional in repairs and equipments on them at San Francisco. The "Australia" has since been admitted to American register. The "Alameda," "Mariposa" and "Zealandia" carried the Australian mail from that date up to 1891, when the "Zealandia" was withdrawn at the request of the New Zealand government, and a British steamship took her place. It was owing to the patriotism and enterprise of Claus Spreckels, however, that American commerce is now, and has been represented on the South Pacific, since 1885; and it is also due to that gentleman and his enterprising sons that San Francisco stands at the head of American ports in the employment of American ships in its foreign trade. The manufactures, trade and commerce of San Francisco owes more to the enterprise, business capacity and integrity of Claus Spreckels individually, and the now incorporated firm of J. D. Spreckels & Bros., than to all other local agencies combined. This firm transacts the largest import and commission business on the Pacific coast, and its credit is established and respected throughout the commercial world.

J. D. Spreckels & Bros. own a fleet of six powerful steamtugs at San Francisco, fitted with every life-sav-

ing and wrecking appliance. Reference has already been made to these unequaled aids to commerce and shipping. Whenever practicable Messrs. Spreckels give contracts for machinery and ships to San Francisco firms. They also own a line of sailing vessels to Honolulu, and in their various enterprises employ over 3,000 men, and it is due to Claus Spreckels to say that while he has had men in his employ for thirty years, there has never been a strike or a man discharged except for cause.

J. D. Spreckels & Bros. also established a commercial company at San Diego, where they have built extensive wharves and coal bunkers, having a capacity of 13,000 tons. They control the Coronado Beach Company, while Mr. Adolph B. Spreckels owns the electric and belt railroad at San Diego. The firm is also building the Coos Bay and Roseburg railroad in Oregon, a standard gauge of 100 miles.

Mr. Claus Spreckels owns a ranch of 4,000 acres at Aptos, Santa Cruz county, on which he has erected a handsome mansion, and where a breeding farm has been established under the supervision of Mr. A. B. Spreckels. In short there is scarcely a branch of industrial development or line of commercial enterprise with which Claus Spreckels, "the Sugar King," and his sons are not indentified on the Pacific coast, and every enterprise they identify themselves with succeeds.

In special lines, by way of summing up, the sugar refining and beet sugar industries of California have been practically founded and built up by Claus Spreckels. To him also the Hawaiian kingdom owes its industrial development and financial stability. In 1884,

when it became imperative for the Hawaiian government to establish a national currency and retire the depreciated silver coins in circulation, which had been introduced from Peru and other South American countries for speculative purposes, Claus Spreckels bought this token money, and at his own risk had dies made and one million Kalakaua dollars coined at San Francisco, in silver, of like weight and fineness as the American standard dollar, and shipped the money to Honolulu. He also subscribed for $500,000 of Hawaiian national bonds, established a commercial house and banking firm at Honolulu, and as necessity required made advances to the Hawaiian government for public purposes, charging only legal interest, although the advances were often made without guarantee for repayment. No other man identified with the Hawaiian islands has done one-tenth part as much as Claus Spreckels in developing the resources, placing Hawaiian finance on a sound basis, and saving its business men from the burden of onerous and oppressive exchange. For this last mentioned service he encountered the enmity of those who had profited by these unreasonable exactions, but on the other hand he enjoyed the satisfaction of benefiting the bulk of the trading classes, while breaking down a crushing monopoly.

To the firm of J. D. Spreckles & Bros. is due the development of the foreign trade of San Francisco. Whilst the China and Japan trade was diverted to the port of Vancouver, by the Canadian Pacific, British competition on the Australian route was removed by this firm, as already narrated, and the Hawaiian trade became wholly identified with the commerce of the Golden Gate through Messrs. Spreckels' enterprise and

business sagacity. They also expended large sums in shipbuilding, etc., at San Francisco, thereby employing skilled labor and helping to build up other brances of manufacture. In southern California they have maintained the supremacy of American shipping, as their enterprise at the port of San Diego demonstrates. In short, the Messrs. Spreckels are merchant princes, whose great wealth has been acquired by legitimate business, in the employment of labor and the promotion of enterprises of public utility and necessity, and their high reputation, which extends throughout the world of trade and commerce, is especially the heritage of California where it has been made.

HOTEL DEL CORONADO AND CORONADO BEACH. Among the facts next to impossible of belief is that one in regard to the lively and beautiful town of Coronado, with its three thousand inhabitants, and metropolitan improvements. In 1885 it was apparently an island in the ocean, but in fact was an arm of land, just above sea level, extending down between San Diego bay and the ocean, the western point reaching within half a mile or so of the promontory upon which is situated the government light at Point Loma, and which is the highest marine light in the world. It was then utterly without human habitation, even to a fisherman's hut, and was covered with unsightly shrubbery. It was about this time that the completion of the Santa Fe railroad to San Diego inspired five enterprising citizens with a belief that this barren spot might be utilized. E. S. Babcock, Joseph Collett, Jacob Gruendike, Heber Ingle and H. L. Story formed



Hotel del Coronado.

a corporation, and obtained title to the "North and South islands" as they were called. These were all men of expanded ideas, and with entire confidence in the practical views of E. S. Babcock, who had been made president of the combination. In 1886 the first ground was broken, and the grand system of improvement commenced. What these included, the more than 350,000 visitors, composed of the best citizens of every land under the shining sun, can well understand. The first sale of lots took place in November, 1886. Ground was broken for the Hotel del Coronado in February, 1887, and in February, 1888, it was opened for tourists, with a railroad running from the hotel over this narrow arm, more than six miles easterly to the mainland, and thence to San Diego, the whole distance being about fifteen miles. A motor road was constructed to the ferry, about a mile and a half, and boats conveyed passengers across the bay to San Diego. The town of Coronado was laid out, with the most generous provision for streets, which are wide enough to deserve the name of broadway for every one of them. Forty thousand shade trees were planted. The San Diego Union describes these as "the tropical palm, the sweet smelling orange, the dark-hued olive, the resinous cypress and pine, the historical fig, the graceful pepper and the towering eucalyptus." In the center of the island, on either side of Orange avenue, the principal thoroughfare which connects the ferry with the hotel is a pretty park abounding in a variety of the plants and flowers which this region is so prolific in producing. Boulevards have been constructed to the south and east for three miles along the beach, and to North island in the opposite direction, from which diverging roadways

through the shrubbery afford an endless change of scenic bits and views.

The parent company was the Coronado Beach Company. Since its organization the Coronado Water Company has been formed, and has piped distilled water to every lot in the place. In 1890 a mineral spring, flowing a great quantity of water of medicinal value, and known and appreciated throughout the United States, was discovered, and necessitated the formation of the Coronado Mineral Water Company. The water is bottled at Coronado Heights, near the mineral spring, on the mainland, and is shipped everywhere in large quantities. Several other companies, all integral parts of the parent company, have been formed, and are in active operation, as the Coronado Railroad Company with its twenty-five miles of road, and the San Diego & Coronado Ferry Company, with two capacious steamers.

Beautiful as all else is, it is the Hotel del Coronado which attracts the thousands to this Eden by the sea. It covers more ground than any hotel in the world, and possesses more attractive features than can be claimed by any other dozen resorts on the known earth, and out of nearly half a million visitors not one has ever been known to discover a feature in house, cuisine, management or location, about which a complaint could be framed. One distinguished visitor says it is a "marvelous institution;" another that it is "unrivaled in the world;" and a third that it is "the finest I have ever seen, and I have seen them all." The California Gold Book ranks it with what it imagines Paradise to be, and believes that one could dream away all of life reclining on the surf-washed gallery,

and watching the tireless waves roll in with their stores of ferns and grasses from the islands of the ocean. It is an existence of which one never tires; for the view changes with every moment, and is always grand and enchanting. It is the spot in which to commune with the Creator, and acknowledge the unlimited extent of His power. Like it there is none other, and the wonder is not that so many return again and again to the lotus-scented atmosphere, but that they can ever summon the determination to leave at all.

In 1890 John D. Spreckels bought out the interest of Mr. H. L. Story in all the varied concerns of the Coronado Beach Company, and became president thereof, with E. S. Babcock vice president and general manager. Prior to that the Spreckels Brothers Commercial Company had been established at San Diego, and their immense wharf and coal bunkers nearly completed. In the construction of wharf, coal bunkers and warehouse, Spreckels & Company expended over $200,000, and what is very characteristic of this family, and very unusual in the improvement of harbor property which is certain to conduce to the benefit of State and National governments, no application was made for help from either to the extent of one cent. These gentlemen determined what would answer the requirements of their own vast and growing commercial business, and expended money of their own therefor, making everything as strong and capacious as any Government engineer would have considered needful. The wharf is 3,500 feet long. Its width gradually becomes greater as it runs out from the shore, commencing with fifty feet and terminating with seventy-five feet at the twenty-six foot water line. It will

accommodate eight of the largest vessels afloat. It was built at a cost of over $90,000. The coal bunkers on the wharf have a capacity of 13,000 gross tons. They are 650 feet long, thirty feet wide and thirty feet in depth. The machinery is of the most modern and best improved type, and in point of efficiency second to none in America. The wharf is situated at the foot of G street, and has a track connecting it with the southern California railroad. Ships are unloaded directly into the cars, which may be either emptied into the company's large warehouse, or forwarded to the interior or the East, as occasion may demand. The work was completed in good time, and in the most thorough manner, and is ready for the uses of the National navy should a sudden emergency render its use necessary.

No member of the Spreckels family, father or sons, has ever been known to make a business mistake. When John D. and Adolph Spreckels diverted a very heavy capital in the neighborhood of two million dollars, to the improvement of San Diego and Coronado, and so soon after the collapse of the boom, a belief in the recuperative power of that section was engendered, and every interest took on new life. Besides the great impetus given commercial interests on the wharf, and the assurance that the Coronado Beach Company would never lack funds for its greatest and most rapid development, the Spreckels brothers bought out the street railroad companies, and have been spending fortunes in making them ample for all the requirements of the growing city. Nearly all the horse car roads have been changed into electric lines, and are being extended to the city limits as fast or faster

than these are settling up. Capt. Charles T. Hindes, of the Commercial Company, not only has general supervision of that great interest, but is the right hand of the Spreckels brothers in executing their gigantic plans for the improvement of San Diego, its land-locked harbor, and Coronado Beach. To return to Coronado Beach an extract from the San Diego Union's great annual for January 1, 1893, may well close this article.

The North island (1,300 acres) is yet intact, and is owned by the Coronado Beach Company. Part of it is under cultivation, while the rest of it makes an excellent coursing ground for rabbits. A fine pack of greyhounds is owned by the hotel, and this makes one of the most attractive features of the sports the hotel guests are privileged to enjoy. Here vast fields of grain wave, fanned by the breath of the salt sea spray. Here, too, are situated the marine ways capable of lifting large ships out of the water for repairs. Here, too, is the proposed site for the big military post, than which a more appropriate or commanding position does not exist. The drive back from the kennels or the company's barns is one of great beauty, and is a favorite one with horseback parties. The hotel, seen from this drive, with the curling breakers lapping its terraces on one side and the variegated shrubbery on the other sides forming a setting for this gem, makes a pretty foreground, while the cottages scattered over South island, with the distant hills beyond Glorietta bay in the background, completes a pleasing picture indeed. There is nothing palatial about the houses on Coronado Beach; nothing pretentious either; but there is an air of comfort, of neighborliness

and of open-heartedness in the quaint styles of architecture, the fenceless grounds and the open doors which is inviting, and the feeling of being a stranger in a strange land never assails the visitor to Coronado. Among those who have built here are Captain Charles T. Hindes, resident partner and manager of the Spreckels Commercial Company ; J. Malcolm Forbes, the Boston capitalist and owner of America's famous trotting queen, Nancy Hanks ; Charles Nordhoff, who had all the world to choose a home in ; K. H. Wade, general manager of the Santa Fe system in southern California, whose office is in Los Angeles, General T. E. Webb, a mining capitalist, and many other wealthy people from the East. Many others from the Atlantic States have bought lots here, and will build on them later, allured by beauties indescribable, and a climate which permits surf bathing every day in the entire year.

HENRY MILLER.—One of the strangest problems connected with the marvelous growth of the various important industries in California is the small number of men whose courage, energy and genius have made the State remarkable throughout the extent of the globe. Outside of a mere handful of wonderful men, those who have helped foward the car of progress have been mere instruments in the hands of those who conceived the projects, and urged their followers to execute the vast measures they had conceived.

Very few have any positive knowledge of what has been accomplished in improving the "cattle upon a

thousand hills" and scattered over the plains of the world. Every one has been impressed with the idea that England held the first place as a producer of prime beef. It has been less than three times the years of California Statehood since the average weight of beef cattle slaughtered in Liverpool was under 370 pounds. What must have been the average weight of cattle in California prior to the discovery of gold, up to which time cattle were only useful for the hide, horns and hoofs? A very few attempts had been made by Boston skippers to improve the herds of practically wild cattle in California, by introducing a few American cattle on every trip to the Pacific coast. The object was not to obtain a better quailty of beef, but a greater weight of hide, and a possible quantity of tallow. It was such herds as these that astonished the American pioneers in 1849, and made them despair of having a supply of beef and any taste of milk and butter, until such time as real domestic cattle could be driven across the plains.

To no man is civilization so much indebted for the high rank California holds as a meat producer as to Henry Miller. A brief sketch of his business career will prove an object lesson of inestimable value to every young man who is determined to succeed.

Health and courage are prime necessities in the beginning, and even these will prove worthless unless accompanied by sterling integrity, indomitable pluck, and a determination never to neglect an appointment, nor defer until to-morrow what can and ought to be done to-day. These qualities Henry Miller possessed in their entirety, and to a strict observance of these simple rules he owes his wonderful success.

Henry Miller was born in Brackenheim, Kingdom of Wurtenburg, July 21, 1828. His early education was attended to in the schools of his native place, and while thorough was not extended. His father was a master butcher, and before his teens young Miller was drilled to know the good points of animals intended for food, and was frequently intrusted with the important duty of selecting and purchasing animals for his father's market. At the age of nineteen, he arrived in New York, and for a considerable time was employed about Washington and other New York markets, giving entire satisfaction to every employer, because he never shirked any duty. The pay, however, and the opportunities to expand, were inadequate to his ambition, and his resolute belief in what he would be able to accomplish. California seemed to promise exactly the field required by his abilities, and to California he came, arriving in San Francisco in 1850, with exactly six dollars in cash. He did not idle one day, nor was he attracted towards the mines by the allurement of gold. He found employment at his trade, worked with energy, and saved every dollar not absolutely required for his support. Living was high, and very poor meals cost a dollar each.

In June, 1851, Mr. Miller concluded that he had sufficient capital to warrant his commencing business for himself. He opened a shop on Dupont street, and began supplying customers with beef, mutton and pork. The latter was then selling at fifty cents per pound, and very frequently was not procurable except at the market of Mr. Miller. He was compelled to buy supplies sparingly, but there was a large profit in all the meats he handled, due mainly to the rare ability he

possessed of knowing how cattle, sheep and hogs would dress, and almost absolutely what per cent. of live weight would be sacrificed in the operation.

In 1853 his six dollars capital had increased until he was able to pay Livingston & Kincaid $33,000 cash for 300 American cattle, averaging 800 pounds per head. This deal enabled him to begin wholesaling, and his stock was handed over to marketmen at $18 and $20 per 100 pounds.

In 1857, in copartnership with Charles Lux, Mr. Miller bought 1,600 fine Texas steers at $67.50 per head. The profit on this venture was so satisfactory that Mr. Lux sold out his share a few months later, and concluding he had enough went East in the spring of 1858. He came back in September of the same year, and the firm of Miller & Lux, known most favorably in financial circles the world over, was consummated. This firm existed until the death of Charles Lux. In its early days the firm purchased 2,000 head of cattle on speculation, and placed them on rented pastures. The cost was so great and the business was becoming so immense that Mr. Miller determined that the firm ought to own its own pasture lands. Individually he bought a part of the Bloomfield ranch, amounting to 1,700 acres, and increased his purchases there until he had 13,000 acres. This is called the home place, near Gilroy, in Santa Clara county.

Miller & Lux also began purchasing large bodies of land. The firm had been paying as high as $1 per acre rent for pasturage, and the Santa Rita ranch, on the San Joaquin river, containing 8,835 acres, was purchased for about $1.25 per acre, and with it 7,500 head of cattle at $5 per head. The firm also purchased the

Tequesquite and Loma Muertas ranches in Monterey and San Benito counties, and continued adding tracts until it owned about 48,400 acres located in eleven different counties, and procured at an average cost of $4 per acre. All the land owned by Mr. Miller and the late firm of Miller & Lux was choice, and some of the Bloomfield ranch and the Santa Rita ranch have been sold at $150 to $500 per acre, and considerable more could be subdivided and sold at more than $500 per acre. The company also owned tracts of valuable pasture land in Nevada and Oregon.

Miller & Lux had, at the death of the latter, not less than 100,000 cattle and more than 80,000 sheep. The number can only be given approximately. They are located on the various tracts of land owned by the firm, though an average of 20,000 sheep per year are fattened for the San Francisco market, and the sales of beef and mutton in this market by this firm will aggregate about $1,500,000 per year. Besides, whenever there is garbage for hogs, large droves of these are raised, and great care is taken to improve the breeds of all the animals used for food.

By the efforts of Mr. Miller and his followers, the meat industry has grown to immense proportions. By careful estimate, San Francisco uses one hundred and seventy-five million pounds of fresh meat every year, and about fifteen million pounds are exported from San Francisco alone. The State contains over a million neat cattle, ten million sheep and two million swine.

As stated, Henry Miller arrived in San Francisco with six dollars cash capital, and an amount represented by energy, courage, and unswerving integrity, upon which no estimate can justly be founded. Re-

duced to dollars and cents it would appear immense. By careful management, and industry which never rested, this capital has been increased in less than forty years to a cash value of probably fifteen million dollars, and the sterling integrity, courage, and energy have lost nothing by use. Mr. Miller possesses fine judgment, and the ability to decide any question instantly, and the courage to stand by his decision to the end. He is one of those rare men whose bare word is a bond. Many times, after a day of severe labor, he has rode all night simply to keep an appointment. In the management of such vast affairs a small army of subordinates has been requisite, and these have always been treated with such frank courtesy that there has never been an important clash between him and his employes.

It is said that labor is practical prayer. Mr. Miller has been engaged in earnest devotion every day of his life since he was ten years old. His prayers have been answered most bountifully. He has found no time for what the idle style recreation. When his immediate interests have not commanded his exertions, mental and physical, the great interests of the State, such as irrigation, have received the support of his money and genius; and in this direction he has changed at least 100,000 acres of practically barren waste into the most productive soil in the State. His own home at Bloomfield is an improved garden of Eden, and lovely beyond the dream of the most luxurious Oriental. Through all economic care has governed, and the waste for which wealthy Americans are noted is nowhere apparent. In everything—courage, integrity, energy and constant watchfulness—he has been a wise example,

and it will be well for California and the country at large if the lesson of his successful life is even partially learned and followed by those who are to succeed him.

The domestic relations of Mr. Miller have been of the happiest and most satisfactory kind. In 1858 he married Miss Naney Wilmot, sister of his partner's wife. She lived but a short time, dying in 1859. Thirteen months later he married Miss Sarah Wilmot Sheldon, neice of his deceased wife.

CHAPTER XVI.

WOMAN IN FRUIT GROWING.

The genuine lover of the human family rejoices greatly when a new avenue is opened for the cultivation of the best ambitions of women. Chief among the many advantages resulting from the discovery of gold in California, is that cosmopolitan principle in society which has tended to develop in women, as well as men, the power to lead and direct others in almost all industrial enterprises, and especially in the important line of fruit production. In that they have shown their fitness to a remarkable degree. In every detail from preparing the ground, selecting the trees and vines, pruning, cultivating, and superintending the picking, packing, shipping and marketing of the product, they have been granted no advantage over their brothers, and yet they have proved that it was exactly the calling suited to the peculiarities of their genius, and in every case, so far as we can learn, they have proved pre eminently successful. The experience of three female fruit growers will sufficiently emphasize the

truth of this position, and we hope may incite others to attempt what has been generally deemed a line of labor for which man alone was adapted.

Nine or ten years ago Mrs. Elise P. Buckingham found herself a resident of the Palace Hotel, with plenty of money to meet reasonable wants, and scarcely any time that was not required for the round of social duties exacted of a cultured, refined and fashionable woman, with a large number of intimate friends in the highest classes in the first literary and social circles stretching from the Atlantic to the Pacific oceans. Mrs. Buckingham is of Scotch origin, a member of one of the most noted families in the East, her grandmother, Martha Hamilton, having been a descendant of the Duke of Hamilton, and married to an officer in the Revolutionary war. The old family homestead was known as Sir William Johnston's Hall and is yet a show place finely preserved at Johnstown, Fulton County, New York. Mrs. Buckingham received a thorough education at the Ingham Institute, Le Roy, New York. She married there and removed to Janesville, Wisconsin, when she was yet in her teens, and soon after again removed, and this time to California. By instinct and culture, and those nice charming qualities which mark the refined lady; beauty of form and face, and possessing perfect health, she would be recognized in any assemblage as the one who would be the most sought after by the discerning. We mention these qualities in evidence that Mrs. Buckingham was a success in the favored position she occupied, and we know from random sketches which have been published from her pen, both in this country and Europe, that she would have been an equal success had she selected a literary or any other profession.

Nine years ago a talented son, T. Hugh Buckingham, was about ready to graduate from his scholastic studies, and would then demand something to do. In looking around for an investment for her money, Mrs. Buckingham heard of a ranch near Vacaville, some fifty miles from San Francisco, which was in the market, and which might return a fair profit if divided up and sold in lots of smaller acreage. Vacaville, and, indeed, all of Solano county, then gave promise of being specially adapted to the profitable growth of fruit; and it had become known throughout the East as sending the most luscious fruit to market earlier than any other locality in California. Before making the purchase, Mrs. Buckingham visited those owning adjoining lands, and bargained with them to take a portion of the purchase off her hands at prices which would give her a nice profit. The ranch was then a stubble field, a good crop of grain having just been harvested. There was a house on it with a history. About 1850 it had been constructed in Kennebec, Maine, and shipped around Cape Horn to Benicia, California. In fact it was intended for four residences, one being a story and a half high, and the others one story. Jose Demetri Pena, a wealthy Mexican, then owned the ranch, and he purchased all four houses, hauled them to Laguna valley, and placed them end to end, making a building 125 feet long, and 18 feet wide in the widest part. A porch extended the entire length, and according to the fashion prevailing the only way of going from one room to another was by passing out to the porch Every room opened on the porch, and did not have a connecting door. Senor Pena was engaged in cattle raising, and later planted his ranch to grain.

He did plant a few vines of the old Mission variety, a few peach trees, ten or twelve pear trees, and half a dozen fig trees. These remained on the ranch when purchased by Mrs. Buckingham, and showed such wonderful growth and perfect health, being now thirty years old, that all her intentions in regard to the disposition of her experimental purchase were changed.

Soon after Mrs. Buckingham made this investment, she had a business conference with her son, who, though a mere lad, and wholly inexperienced in any class of farm or ranch work, was rich in courage and hope, and insisted that he and a much loved class associate of his own age, directed by his mother, could cultivate the ranch in fruit, and could make a greater profit than could be obtained from the would-be purchasers, besides giving him congenial and much desired employment. That was the course determined upon, and the whole ranch of about 400 acres was retained intact. Practical people gave an outside limit of five years in which Mrs. Buckingham and her college boy assistants would sink the capital invested, fail utterly, and, as the more brutal put it, find a home in the poorhouse. This was more than eight years ago. There has never been an interval when improvements were not in progress, and the prosperity of every interest of the marvellously clean and well cultivated orchard and vineyard at high tide. The house was remodeled to accord with comfort and convenience, the wheat fields plowed so deeply that they were practically subsoiled, and as many acres as possible, year by year, placed in pears, prunes, apricots, nectarines, peaches and cherries. Twenty acres are in prunes, and more are to be planted. Twenty acres are in cherries, and about the same amount in pears. There

are seventy acres of choice varieties of table grapes, and in seasons of average moisture these may be picked over three times, being really three crops. Most of the Lagunita rancho is in fruit. The crop of pears for this year—1892—netted clear of every conceivable expense, $196 per acre, and the trees are only about seven years old, and have barely begun to produce. Mrs. Buckingham sold eight pound boxes of cherries in the Chicago market, at a price which netted her $6 per box. This was because they were intelligently graded, artistically packed, and reached the market ahead of any others from any where. The pear venture was so satisfactory that forty-five acres additional were planted last fall. There does not seem to be any scent of "poorhouse" in these achievements. For two seasons young Mr. Buckingham has had charge in the main of the fruit interests, assisted by his whilom college mate, Mr. Hamilton Boyce, who is thoroughly in touch with the prosperity of the Lagunita rancho.

Three years ago Mrs. Buckingham was offered nine hundred and thirty acres of partially improved land a little over a mile distant from her home, and separated from the Laguna valley by a hill of moderate size. She could buy it on time by mortgaging her own home to secure the payment of $100,000. Having never owed a dollar in her life, even a consideration of the proposition was approached with fear. Finally the bargain was closed, and was followed by three days of seclusion and anxiety. Then hope returned, and her plans for disposing of the tract were systematized. First the county surveyor cut it up into lots convenient for handling, and wide avenues were provided between each tract. When ready for the market it

was placed under the control of the most successful real estate firm in San Francisco. In six months this firm had found purchasers, independent of the exertions of Mrs. Buckingham, to the extent of $8,000 to $10,000, and at a cost to her of the latter sum. Then, as her son had assumed the management of the home vineyard and orchard, Mrs. Buckingham resumed control of her investment, and up to this writing has found desirable purchasers for enough to pay off her indebtedness of $100,000, and leave her nearly 400 acres and $25,000 as profit.

A word here as to T. Hugh Buckingham. There can be no question of his transcendant natural ability, but nearly all his experience in fruit culture has been under the instruction and supervision of his gifted and energetic mother. Not long ago he was selected by the Fruit Growers' Union to spend a season in the Chicago market, superintending and directing the great interests of the Union, and gathering data for the use of the Union in the future. Mr. A. T. Hatch, the best authority on fruits in California, which is exactly the same as saying the best in the world, has said that the knowledge and judgment of young Buckingham in regard to fruits was simply phenomenal, and he would rather depend upon his judgment than that of any older man in the State.

The experience of Miss Sarah A. Bates, who owns forty-two acres of the most intelligently cultivated orchard and vineyard in Vaca valley, fits in here admirably. Miss Bates was born and educated in New York City, and spent several years in acquiring proficiency in etching and other art matters in Chicago. She is thoroughly cultured and refined. She bought

her land of Mrs. Buckingham, adjoining eighty acres belonging to a relative. While the trees and vines on her own purchase were growing and required only a part of her attention, she found employment in her art in San Francisco, and earned enough to pay for a stylish span of horses and carriage. Now she oversees and directs all the work on these one hundred and twenty acres, and there is not a blade of grass visible in the orchards, and not likely any under the leaves and clusters of grapes in the vineyard. She is not far past twenty years of age, but the cultivation of the fields under her control are as superior to some owned and managed by men in the same neighborhood as can well be conceived.

We can add the experience of Mrs. Harriet Barrows, who purchased twenty acres of land near Mrs. Buckingham. She had no money left for trees, nor for the necessary cultivation of them till they came into bearing. She was a thorough housekeeper and a very superior cook. Her services in this direction readily commanded thirty dollars per month. Then, mortgaging her land, she bought the necessary trees, and was sadly disappointed to find nine-tenths of all of them worthless. There was no repining. It simply meant a season more of servitude at the kitchen range, and the fruition of brilliant hopes a little longer deferred. It was two years before she could pronounce herself independent. Now she has a highly improved home paid for, her orchards and vines in bearing, and her income last season amounted to nearly $3,000, or about eight per cent. on a $2,000 per acre valuation of her land, besides her support while the crop was growing and being harvested.

We do not propose contending that all other females can do as well as these ladies have done. These have had the advice and encouragement of Mrs. Buckingham. They had bought their land from her and on her advice. She silently guaranteed to herself, saying nothing to them, that they should succeed. Failure of any of those who purchased land of her would distress her as profoundly as it would them. It is a matter of principle and pride with her that the boundaries of land she has owned can be fixed by the passerby with the utmost certainty, having no other guide than the superiority of the culture, and the air of generous prosperity pervading every visible interest. There are other well kept orchards and vineyards in Vaca and Laguna valleys. There are none that will compare with those superintended by these three ladies. It is not that male fruit growers have no faith in high culture, and do not know the profit of having everything in apple-pie order. But the fact remains that the leaves are still green on the trees of the orchards well cultivated, when they have gone to sleep for the winter where wild oats and grasses are sucking the vitality from the soil.

In looks and bearing, Mrs. Buckingham is still young. We have briefly, too briefly, glanced at her valuable work. She is wonderfully capable of putting her experience in such form as will render it of use to members of her own sex, and not less to men who are ambitious to become model fruit growers. As the fruit interest enlarges, as it must enlarge, when all the millions of people in America have a chance to share in the glorious fruit products of California, such a work from the pen of Mrs. Buckingham would be as valuable

to the many as her example has been to those few who have had the privilege of examining her home work. While work in the mines proves too arduous for women, and is an industry which must be prosecuted by men, requiring the strongest physical force, the development of the finer artistic pursuits, resulting from the discovery of precious metals, has shown women to be equal, if not superior, in all the avenues for the development of the vast resources of this wonderful country.

CHAPTER XVII.

IRRIGATION.

The grandest discovery which has been made in California has been the scientific application of water to everything which germinates in her prolific soil. The accepted idea the world over has been that water would wet the earth, but that it contained grand fertilizing qualities was outside of belief. The old padres had crude notions in regard to it, and crude methods for its application; but generally the operation was to drench the ground until it was as full of water as it would be after the heaviest and most prolonged downpour from the clouds. They obtained results, though as inferior to those now produced as the areas treated were smaller than the vast acreage which the American culturists have reclaimed from arid wastes.

The term "grandest discovery" is used advisedly. The discovery of gold constituted an epoch in the life of civilization, progress and prosperity. The people of this generation are scarely capable of appreciating the magnitude of its influence. The yellow metal spread out over the earth, revivifying the hopes and

aspirations of every living soul. It made achievements possible which trench closely upon the miraculous. It unchained the imprisoned ambitions, and sent the life current throbbing through every vein of people so grand that they assimilate the likeness of gods, knowing good from evil. It made wars next to impossible by enabling man to construct engines of destruction so marvelously perfect that enlightened nations are afraid to combat, lest they become extinct on the map of the world. It multiplied universities and made civilized countries great houses of learning, broad and comprehensive as their uttermost limits. It set up monuments everywhere, marking the line between right and wrong. It emphasized the slow growth of the ages by strides forward as brilliant as flashes of light. It has enabled men and women to know their strength, and intelligently perform the duties with which they were burdened by the Creator, and the performance of which it has caused to become the loftiest human pleasures possible this side of heaven. These are some of the grand results which have evolved from the insignificant yellow nugget picked up by Marshall in a California canyon, and tested by Jennie Wimmer in a kettle of boiling soap on the 19th day of January, 1848.

Then what was left for irrigation? The old maps designated the "Great American Desert." Its eastern limit started at a line running north from the Indian Territory, and cleaving Kansas, Nebraska, and the grand principality now called the Dacotas. It included almost every foot of soil from this line to the setting sun. This vast area was practically worthless. The Mormons proved it possible for some good thing to

come out of Nazareth by reclaiming arid spots about the confines of the great Salt Lake, and making them to bloom and bear as beautiful and generously as the Garden of Eden or the Valley of the Nile. Still, until the results produced by California irrigationists, the majority of the acres comprised in the original Great American Desert were deemed fit only for the occupation of coyotes, jack-rabbits and reptiles, and such human beings as could subsist upon these. Now the possibility of reclaiming these broad plains is recognized, and irrigation must be given the credit of making habitable as great an area as that which has been given over to civilization and Christianity, up to this date by the grand discovery made by Columbus.

More than that. A tremendous acreage, in all the older States, had become barren, and had been turned out to recuperate by the slow processes of nature. The deeper the soil and the more thorough the tillage the less dependent is the husbandman upon water at the times when it most influences the fruiting of cereals, vines and trees. But in most of the land, in the Eastern and Southern States, the soil was never abundant, and the elements necessary for satisfactory returns have been drawn from the earth by planting it to the same things year in and year out. Exactly what there is in water to revive the land and increase its fertility is a mystery. When it is known why the same plat of ground will produce a sugar beet, a lemon, orange, and turpentine pine, it may be possible to formulate a theory approaching correctness. At present it is sufficient to know that irrigation, intelligently applied, gives returns unknown where the sole dependence is upon precipitation from the clouds,

no matter how regular and abundant that may be. That is proved by California experience as it has been nowhere else. The discovery of this fact, when and how to apply water, will make its way east. It will not travel as fast as did the blessings from the placer canyons and the gold-bearing mountains, but it will eventually enable the tobacco planters of Virginia, the cotton planters of all the Southern States, and the sugar planter of Louisiana, to reckon with absolute certainty on a crop every year, instead of once in awhile as now; because, from storage reservoirs, they will give their crops drink when it is necessary to vitality, and is withheld by the clouds. The same will be true of the fields, gardens and orchards in the East, and in the more fortunate Western States. Water is king, crowned by the California horticulturist and vineyardist, and will be introduced to all parts of America, and recognized as the most generous monarch the world has ever seen.

One of the most important irrigation enterprises in the State is that of the Crocker-Huffman Land and Water Company, in Merced county, one hundred and fifty miles south of San Francisco. Merced is the largest town in the county, and the first house in the place was erected after the Southern Pacific railroad reached there on its way to Los Angeles in 1872. It has three prosperous banks, three influential newspapers, five well-supported churches, excellent schools, gas, and the finest water-works of any town in the State. The water is brought from Lake Yosemite in a sixteen inch pipe, and under such pressure that a stream of water can be thrown forty feet above the top of the highest house. It is in such abundant sup-

ply that no resident will ever be stinted in its use. Merced is surrounded by the finest of fruit lands, and the varieties to which these are adapted comprise nearly all the deciduous and citrus fruits grown in the State. Add to these, walnuts, almonds, table, wine and raisin grapes, and every variety of small fruits and vegetables, and a fair estimate may be made of what the soil of Merced county is good for. No region in the State has a better reputation for producing immense crops of cereals. In most of the county wheat, barley and oats were grown without irrigation, though the annual rainfall does not average more than ten inches, sometimes reaching twenty inches during the year. But citrus and deciduous fruits required irrigation, and these are the great wealth and comfort producers which make it possible for a large family to subsist luxuriously on ten acres of California land, and begin to lay aside a nice surplus in the savings bank.

As mentioned, the little city of Merced is a prosperous tribute to the community building influences of the Southern Pacific management. Two other towns in the county, Volta and Los Banos, owe their existence to the policy of the Southern Pacific Company of building branches and extensions ahead of, and as an inducement to, the formation of productive settlements. In many respects Merced county is to be envied, and in none more than in the fact that Col. Charles F. Crocker, vice-president of the Southern Pacific Company, has large landed interests there. Colonel Crocker is a thorough railroad manager, and does not care to divide his energies on the details of other great enterprises. But he appreciates the powerful effect rapidly growing and highly prosperous communities have upon

the fortunes of a transportation company, and possesses that quality of a great general which enables him to select his aids with unmistaking judgment. Associating with himself Mr. C. H. Huffman, long identified with land interests in Merced county, the plan was consummated for tapping the Merced river, and by means of one of the most complete and costly canals in the country, conveying an immense volume of water for twenty-seven miles to Yosemite lake, and there storing it for distribution as wanted to all the lands owned by the Crocker-Huffman Land and Water Company. Over two millions of dollars were expended on this enterprise, and a constant supply of sufficient water to thoroughly irrigate nearly a million acres of land is assured. It is with the addition of plenty of surface water for irrigation that it is made possible for a thousand industrious people in California to live luxuriously on the products of their labor, where only one person could barely exist without. The grand discoverers of miracles in California have proved this wonderful fact, time and time again, during the last twenty years, and this is what the Crocker-Huffman Land and Water Company has accomplished in prosperous and progressive Merced county. The Rotterdam Colony, the British Colony, the El Capitan Colony, and other thriving and rapidly growing communities, are bearing marked testimony to the wisdom and patriotism which produces such philanthropic and remunerative works as this, and which have their counterparts, on a smaller scale, in every part of California. The owners of almost countless acres are becoming the direct benefactors of the race, and there are only a few in all the world who would deny them

any part of the munificent reward which the great transformation returns to them. They are dispensing the "greatest good to the greatest number," and to do that has been the soulful aspiration of the best people who have imprinted their individuality on all the ages of the world. In this case it is said that more actual settlers purchased homes in the Crocker-Huffman Land and Water Company Colony tracts during the last three months of 1892 than elsewhere in all the great and attractive San Joaquin valley.

There is no question that the men deserving most credit are those who are doing most for the development of California, and it matters little to the general public if their efforts bring them great personal profit. We have been told that the man possessing more than 640 acres of land, regardless of how he obtained it or what it cost him, should be taken to some secluded place and choked until he surrendered all in excess of a mile square. When it is remembered that ten acres in California fruits is ample for the support of a large family in comfort, the position would seem to be well taken. But there is much to be said on the other side. Several gentlemen in California count their acres by the thousand, and some by the hundred thousand. Very much of this land, without water, was poor property at twelve and a half cents an acre. It formed a poor sheep range for a portion of the year. A family could not have made a support on a thousand acres of it. With water, ten acres would be sufficient, and it would be worth, unimproved, from $50 to $300 an acre. No ordinary farmer would dare attempt the expense of bringing water from the mountains, even had he the money, nor could a thousand small farmers

agree upon a method by which water could be furnished to each as wanted. The owner of a great ranch, thousands of square miles in extent, alone would be justified in undertaking such a work, and, as a matter of fact, the world is indebted to these great land owners for the results obtained from irrigation. Millions of dollars had to be expended before the lands in Fresno, Kern and Los Angeles, San Bernardino and San Diego counties could be expected to produce moderately, to say nothing of the immense quantities of raisins, oranges, lemons, olives, and other products which load the trains for the East, and are increasing in quantity every day. It was fortunate for California, and fortunate for the thousands who will find small, but prosperous homes there, that so much of these lands was in the hands of so few men.

Take the San Gabriel valley as an Illustration. A few a years ago a considerable part of it passed into the hands of E. J. Baldwin, known the world over as a man who "can keep a hotel," and to Californians as enterprising and thorough in everything he undertakes. He had purchased the Santa Anita, San Francisquito, La Merced, La Puente, Filipe Lugo, Potrero Grande, Cienega and Potrero Chico ranchos. These aggregated over 52,000 acres, and had no improvements of importance. In his usual thorough manner he commenced to improve them. It would be interesting to follow him through the grand work. It is not necessary. Thousands upon thousands of trees were planted, miles of which were locust, poplar, mulberry, eucalyptus, pine and cedar, for shades along the broad avenues. These are now large trees, and most of them were started from the seed. A large area was planted

to oranges, and then began the search for water. Large amounts were spent in boring for artesian water, and a number of flowing wells were obtained. A reservoir covering seven acres was built near the cottage of Santa Anita, and therein water was stored for distribution. This would hold a small amount compared with what would be needed on the whole body of land. Other reservoirs were constructed convenient to the lands they are to supply with water. Mr. Baldwin has an irrigation system of his own, and insists that it is more economical and in every way better than building costly dams across canyons in the mountains. Briefly, he would have the owner of a tract of land construct his own storage reservoir. It will not be a costly affair, and will be immensely more satisfactory to the owner than depending upon a water company and being compelled to take his water only when it suits their convenience. The reservoirs constructed by Mr. Baldwin are as perfect as human skill can make them. From there water is conveyed to all parts of the estate. The large number of artesian wells, generous as is their flow, would not furnish the supply necessary. High up the mountain side, on the edge of a canyon, tunnels were run into the rock until water was struck, and this is conveyed in iron pipes to the reservoirs, and makes the supply more than sufficient to irrigate all the lands at present under cultivation. As none of it is conveyed in open flumes or ditches, the loss by evaporation is insignificant, and the waste is nominal.

Borings have been made over other portions of the estate, and a certainty of water can be guaranteed on almost every acre. The Santa Anita home ranch, con-

sisting of 4,000 acres, and including the race track and training ground for Baldwin's blooded horses, is not for sale. Several fortunes of good size have been expended in beautifying that, and it is as lovely as a morning dream, and is possessed of every luxury and convenience. Some years ago, when the Santa Anita ranch was the only portion of the estate producing, Mr. Baldwin made an exhibit at the State agricultural fair, consisting of grape brandy, port wine, white wines and clarets from one to ten years old; fourteen choice varieties of grapes, seven varieties of oranges, limes, lemons, pomegranates, Japanese persimmons, bananas, white and black figs, Hungarian prunes, plums, russet and Bartlett pears, nectarines, peaches, olives, hard and soft shell almonds, English walnuts, black walnuts, chestnuts, potatoes, asparagus and almost every variety of vegetables; white and yellow corn, and the famous Egyptian corn; four kinds of sugar cane, tobacco and Australian wheat, chevalier and common barley, white oats, rye, flax, hops, cotton, castor beans, and enough other products to show the soil was adapted to the growth of any article desired.

In connection with the ranch is a gilt-edge dairy, and 150 cows—choice Devon and graded—are fed and milked. The dairy and stock ranch covers 8,650 acres and 4,000 head of cattle and 20,000 head of sheep are kept in stock. The latter are herded upon the hill-sides and on the fields after harvest.

Mr. Baldwin is very proud of his thoroughbred racers, and every care is bestowed upon them. Besides those which have made a record astonishing to racing men, thirty or forty colts are now in training, and some of them will prove record breakers.

Mr. Baldwin has determined to do all he can to enhance the reputation of California wines and brandies. The grapes grown for wine are the choicest, and those which have been proved by use. The products of his winery have an excellent name. He sells no brandy until it is five years old, and has in stock 140,000 gallons made between 1874 and 1890. During that time he made about 20,000 gallons of choice wines of different varieties each year. Since 1889 no brandy has been distilled, and the output of wines has averaged 100,000 gallons per year.

The orange crop from these ranches is enormous, but none of it reaches the Eastern market. The entire product is sold in British Columbia and in the States and Territories on the Pacific coast. Some of the orange trees are near twenty years old, and are very prolific. In 1875 Mr. Baldwin paid $7.00 each for orange trees and the same kind can be had for 50 cents now. In 1891 he refused $1,500 per acre for a portion of his crop, the packer to take the oranges from the trees. He gathered them himself and netted over $1,800 per acre from the same trees.

Corroborative of our statement that it was fortunate for the Nation and the people that the lands requiring irrigation were held in large bodies by men who had to supply them with water in self-defense, the fact that three thousand persons now subsist in comfort, and even luxury, on lands which were barren when Mr. Baldwin obtained their ownership, is in evidence. Furthermore he has about one hundred renters, and a small army of employes. The acreage of deciduous fruits has been greatly increased, and this year a packery and cannery will be added, to the other important

industries at Arcadia, which owe their inception to the enterprise of E. J. Baldwin.

Mr. H. A. Unruh, Arcadia, California, is the manager of the Baldwin estate. He is an ex-soldier, having enlisted from Indiana when sixteen years old, and spent nine months of the war in Libby and other prisons of the South. That did not discourage him from re-enlisting, and serving to the end of the war. In 1866 he came to California, and was in the service of the Central Pacific Railroad Company for some time. That proved an excellent training for the employment with Mr. Baldwin, in which he has been engaged since 1879, now having general supervision of his immense interests. At this time he is specially interested in placing industrious persons on the unimproved lands of Mr. Baldwin, and upon terms most generous to the home-seeker, who is advised to take a receipt for the money paid for his passage to California, which will be received as cash in payment for lands. Four railroads traverse these lands, the Southern Pacific, Santa Fe, Rapid Transit and Terminal, the latter intending to continue to Salt Lake. The Santa Fe and Rapid Transit have stations at Arcadia, the location of the Oakwood hotel.

Mr. Baldwin has been referred to as capable of "keeping a hotel." The Baldwin at San Francisco, the Tallac at Lake Tahoe, and the Oakwood, at Arcadia, were all constructed under his instructions, and are owned by him. Money has not been spared in improving the natural advantages about the Tallac and Oakwood, of which Mr. Lawrence is given the management. No point in Italy or Switzerland can surpass the scenery about Lake Tahoe in beauty and grandeur, and

everywhere but in California guests would never tire of the changing tints upon the mountains overlooking the San Gabriel valley. Besides the railroads named, a coach and four makes the round trip from Los Angeles to Oakwood every day, and many thousand, in the course of the year, take the trip, lunching at the Oakwood with Mr. Lawrence.

One of the first great irrigation ventures in California was that consummated by the San Diego Land and Town Company, which owned the National rancho, Otay rancho, Chula Vista, National City town site, and other mesa and valley properties, constituting a body of land over 40,000 acres in extent. It was all adapted to irrigation, without which its wonderful fertility would be expended in the propagation of greasewood, sagebrush, and other unsightly and worthless shrubbery. Water must be had. The company obtained water rights on the Sweetwater river, so called through courtesy, as during the greatest portion of the year it was scarcely entitled to the name of rivulet. Here was constructed the Sweetwater dam, which has become familiar to most readers of the United States, and has been investigated by Government engineers, and very many others in California and other States and Territories in the arid region, who desired to take advantage of the splendid specimen of hydraulic engineering furnished by this admirable system.

The Sweeterwater dam is unlike others in some important respects. The bottom of the river canyon was excavated to solid bedrock. From the foundation, which is forty-six feet thick, it is built of solid granite, laid in Portland cement, and is constructed as an arch, with the elliptic facing the great weight of water.

The length of the wall at the base is seventy-six feet, and at the top, 396 feet, and the thickness at the top is twelve feet. The height from bedrock is ninety feet, and from the bed of the river, eighty feet. The granite walls of the canyons are immovable as the everlasting mountains, and the ends of the dam are cemented to these. A thousand times the weight of water pressing against this dam would only serve to strengthen it, and even now it has been frequently subjected to the pressure of over six billion gallons of water. It is a sample of engineering which reflects great credit on all concerned, and has brought the services of Mr. Jas. D. Schuyler into general demand as consulting engineer in other great irrigation works.

Now the San Diego Land and Town Company have plenty of water to amply supply all their great acreage of mesa and valley lands. The effects produced in the last four years are simply wonderful. Starting with the finest climate to be found in fortunate California, where the climate reduces the cost of subsistence fully one-half, and renders living a perenneal joy, and with a soil which has been drawing every valuable element of fertility from the disintegrating rocks on the mountains for unnumbered ages, and with a location which is indeed Chula Vista, meaning a "surpassingly beautiful view," with its background of mountains, and the cities of National City and San Diego, the placid bay, the peninsula of Coronado, ending in a vast perpetual bouquet of ever blooming beauty, and the promontory of Point Loma to the front, it is not strange that orange, lemon and olive orchards are crowding each other throughout the whole extent.

The company, whose main office is in the Mason building, at 70 Kilby street, Boston, have been most fortunate in the selection of managing officers at National City. The late Colonel W. C. Dickinson was as genial as the climate in which he lived, and his mantle has fallen upon a younger man, Mr. John E. Boal, who presents the charming attractions of the vast domain with the same intelligent clearness for which his predecessor was noted.

This irrigation system has supplied the only iugredient lacking to make this section the most desirable on earth. With seasons which are a perpetual Indian summer, water as pure and healthful as can be distilled from snow and ice, and soil whose fertility is unrivaled, the resident who would make complaint of his surroundings deserves no great blessing on earth or in heaven.

There is no place in California where the effects of water have been as remarkable as at Redlands, at the upper end of Santa Ana valley. In 1885 this was a sheep ranch, somewhat remote from transportation, but most romantically situated. Forty miles away, and across a considerable range of mountains, it was practicable to build a reservoir which would store water sufficient to irrigate many times the twelve miles square contained in this district. There were no improvements here of consequence. Hill and valley were covered with sagebrush, greasewood and cactus. Tarantulas, centipedes and scorpions were abundant. Beyond the grandeur and beauty of the scenery, there was nothing specially attractive about the location. To-day several trains each way reach the city on tracks which have been laid by both the Southern Pacific and

Santa Fe companies. Redlands has become a city of 4,000 of the happiest and most contented people to be found anywhere. They have every lot, including the churchyards, planted to orange trees, and in February, 1893, these were bending beneath the weight of golden fruit. There are two street railroads which convey persons to the high points overlooking the prosperous and picturesque valley, and the grand piles of brick and stone which constitute the business center of the compactly built city. The business of the post-office in 1888 was $1,868, and for 1892, something over $8,000.

The hills—mountains' foothills—adjoining Redlands on the southeast are covered with bearing orchards of lemons and oranges, and in very many places the hillsides are so steep that they required terracing before there was room on which to plant a tree. There are many points in California which bear testimony to what the railroads and water can do in the way of changing an unsightly waste into a bower of flowers and fruitfulness, but there are none where the progress and prosperity attending the use of these gifts of God are more marked than at Redlands—in less than seven years changed from a desert to a garden of beauty and golden wealth.

Without water for irrigation there was no more unpromising desert in California than the upper end of Santa Ana valley. To be sure some water had been utilized from the Santa Ana river and Mill creek, but it was insufficient for even the partial reclamation of any great part of the thousands of acres tributary to Red lands. Then human courage and enterprise took a hand. The mountains to the north and east climb away

toward the firmament, and the higher points of some of them are mantled perpetually with ice and snow. At some time before white prospectors took an interest in the San Bernardino range, a natural reservoir or lake existed high up in the mountains. How its walls became cleft, letting all its water discharge down through the canyons, is among the natural mysteries with which every California canyon abounds. How to repair the break and create a reservoir capable of storing several time as much water as the valley would require in the dryest season, was no mystery. To conduct it to the numerous places where it would do most good was the problem. Courage, energy and capital constitute a masterly triumvirate. These were enlisted, and on November 15, 1890, the Bear Valley Irrigation Company was organized with four million dollars capital. Six distributing reservoirs were constructed near where the water would be needed, and from the great lake in the mountains the pure water is now conveyed to these reservoirs; thence is carried to every owner of five, ten, twenty or more acres in the valley. There are about 25,000 acres of fruit lands tributary to Redlands. But this Bear Valley Irrigation Company does not intend to confine its life and wealth-giving power toRedlands. The Pacific railroad passes through Gorgona pass, and has a station called Brookside about two miles from the center of Redlands. Five miles beyond that, and across a considerable mountain, in the San Jacinto valley, is as fine a body of land as there is in the State. It is equal to anything at Riverside, Redlands or in San Gabriel valley—that is, with water. As the Bear Valley Irrigation Company owns over twenty thousand acres of the best of these lands,

self-defense required that some of its surplus water be carried to a section known as the Alessandro irrigation district. There are only about four thousand acres in the district not owned by the Bear Valley Irrigation Company. Most of the difficult engineering is accomplished, the mountains tunneled, and very soon the water will be turned on to every tract in the district—that is, it will be ready to flow, as when and where desired. The experience of Redlands will be repeated, but on a quicker plane, because the Sunset trains of the Southern Pacific pass on one side, and the Santa Fe runs directly through the tract. Alessandro will not have Scipio Craig and his fast-running pen and press to record every mark of improvement; but he is near enough to keep the outside world advised of the starting of street-car lines, organization of banks and building of churches, all of which will be incidents of Alessandro in the coming year. Next year it will be a city. Chas. W. Green, late of Murray Hill, New York City, is now the president of the Bear Valley Irrigation Company. He has been identified with the interests of the company from the start, but at long range. How he must have appreciated the fertility of the soil and the miraculous power of water which could produce a city in the desert almost as quickly as Jonah's gourd came to maturity! And beautiful Redlands must make no halt in her progress or Alessandro will pass her by. Irrigation has decreed it.

In Fresno, Tulare and Kern counties, irrigation has worked wonders. The snows which bury the tops of the mountains to great depths in winter, and slowly turn to water during the summer, have been utilized for the use and enrichment of thousands. The hun-

dreds of miles of canals, and thousands of miles of ditches, with which these counties are checkered, would never have been constructed by men of small capital. It required men of large means like J. B. Haggin, Lloyd Tevis, George Hearst, Dr. C. B. Perrin, Henry Miller, Judge W. F. Goad, Irwin C. Stump and others who deserve mention, who, as proprietors of great bodies of unproductive land, had to put water upon the fertile acres in self-defense. The transformation has been most wonderful, and God, water and the railroads, supplemented and accentuated by the enterprise and energy of patriotic men, has prepared these counties for the luxurious support of as many people as there are in the whole State of New York, including her great cities. First, the underground rivers were tapped, and vast volumes of water answered the call, and an arid waste became clothed in luxuriant verdure and perpetual bloom. The artesian wells emphasized the necessity for water, and proved the unexcelled fertility of the soil. They accomplished something much greater. They convinced the great cattle kings, whose herds held dominion everywhere, that it was criminal to deny the use of these acres to horticulturists and vineyardists. The result was the canals and ditches, and the inauguration of the plan of small tracts, and the colonizing of the thrifty and industrious from the crowded centers of population in the East and in Europe. With scarcely an exception, all who have come have been benefited, and have proved forerunners of others equally anxious to share in blessings which must be enjoyed before they can be credited or appreciated. Mr. Hughes, a land dealer in Fresno, gives his experience with purchasers, which goes far

to show the extraordinary prosperity which prevails. Up to 1893 he had sold 30,000 acres of land near Fresno, in ten, twenty and forty acre tracts. No first payment was required, but each purchaser bound himself to plant a certain proportion of the tract to trees and vines in a given time. He foreclosed but four mortgages, and not a dozen gave up their purchase because of inability to comply with the terms. It is not usual to sell lands on credit, but this is probably a fair statement of the proportion of purchasers of lands with water in California, who default in payment from any cause. California ranchers borrow money sometimes, but the cases where mortgages are foreclosed are very rare.

The San Jacinto valley contains about 200,000 acres of very rich land, lying partly in San Bernardino and partly in San Diego county. It is at an altitude of from 1,400 to 1,900 feet above sea-level, with about the proper incline to render it easily irrigated, and composed of such soil as would not bake after a thorough wetting. Experiment has proved it exactly adapted to the production of fine lemons, oranges, olives, peaches, apricots and raisins, and inferior to no portion of the State for Alfalfa and vegetables.

The Jacinto valley is especially fortunate in its transportation facilities. The Santa Fe system has a line under the name of the Southern California which traverses the valley from end to end, with several branches. The Southern Pacific has a line near the upper end of the valley, and both companies are steadily extending their lines to every point where settlements of orchardists and vineyardists are probable. This gives speedy and cheap connection with markets

everywhere. A considerable portion of the valley produced fine crops of wheat and barley in seasons when there was an average rainfall, without irrigation; but the crop was not certain. For profitable culture water was a necessity. The maximum value of the land for grain crops was $30 per acre without water, and that best adapted for fruit growing from $50 to $60. With a supply of water the minimum price would be $100 per acre for wholly unimproved lands.

The Bear Valley Irrigation Company is interested in supplying water to the upper end of the San Jacinto Valley, and has completed its system for irrigating many thousands of acres in the Alessandro district. The Lake Hemet Water Company is now constructing what promises to be the highest dam in the world. The location selected was most favorable for the magnificent work. The canyon is about 5,000 feet above sea-level, and is only 80 feet wide at the bottom between immovable granite walls, and only 250 feet wide at the top. It is planned to run a dam 160 feet high, which is practicable, when the reservoir back of it will hold eleven billion gallons of water, and sufficient to thoroughly irrigate all the land in the valley which is not supplied by the Bear Valley Irrigation Company. The work so far performed has been the best of its kind. First the bottom of the canyon was excavated by blasting until a smooth and solid bottom was obtained for the wall, to be 100 feet thick at the base. This was filled with granite blocks, weighing from five to fifteen tons, cemented together, until practically one unbroken stone. This solid base, equal to the unbroken granite upon which it rests, is carried up twelve feet, where the walls of the

canyon are eighty feet apart. From thence to the top the upper and lower faces of the dam are composed of layers of these immense granite blocks, and the interior is composed of granite blocks nearly as large, laid in concrete of washed sand and the best Portland cement, under the supervision of trained engineers, who have the benefit of the experience of J. D. Schuyler, the great engineer, who constructed the world-renowned Sweetwater dam, and who says of this: "When completed, it will unquestionably be, not only the highest, but the finest dam on the continent—strong, safe, solid, and secure for all ages."

The labor-saving machinery, capable of handling granite blocks weighing thirty tons, was selected by Mr. E. L. Mayberry, manager of the company. Without the aid of such devices it would have been almost impossible to have constructed this great work, using such ponderous blocks of granite as are cemented into its wall. This irrigation system drains a water-shed of over 100 square miles of snow-clad mountain. It will cover 700 acres of land when filled, with an average depth of 65 feet. The water is as pure as can be derived from melted snow, and will be carried to dwellers in the valley under a 2,000 foot pressure, rendering it more available than a steam pump for sprinkling yards and suppressing conflagrations.

It would be interesting to give a detailed description of all the many irrigation systems in the State. They are doing a wonderful work, and making the arid spots to laugh with the gladness of a superb benevolence. It has not been practicable to mention but few or give a detailed description of any. The windmills of the State, for which a propelling breeze may be

safely counted upon a portion of every twenty-four hours in the year, are supplying water for irrigating many thousand acres of flower and vegetable gardens, orchards, and vineyards. Many persons are using pumps driven by gasoline engines to raise water to the mesas and hillsides where it is a necessity. Water is king in California, and his subjects bow down to him early and late, and use every conceivable means to obtain more intimate acquaintance with him. In many parts of the State there is no prospect that the supply of water will ever be in excess, and plans are being devised to make a little water go a great way, because upon the economical use of it depends the prosperity of the people.

CHAPTER XVIII.

ASPHALTUM.

This valuable substance is found in many States of this Union, but not to an extent to render it of commercial importance outside of California. In several counties of California there are great quantities of what is known as bituminous rock or sand-stone, and which has been largely used in the construction of sidewalks, street pavements, cement for yard walks, and very many other purposes. It is found in abundant deposits in San Bernardino, San Joaquin, Los Angeles and Orange counties, and in deposits of vast extent in San Luis Obispo, Santa Cruz, Santa Barbara, Ventura and Kern counties. Very much of that found requires refining before it will justify shipment for long distances; but the bulk of the known deposits will pay for refining, rendering it superior to that

found elsewhere on the globe so far as known. Val de Travers in Switzerland, and the pitch Lake of Trinidad, West Indies, supply about all in use in Paris, London and Berlin, and most of that which has been used in the Eastern cities has been brought from Lake Trinidad. The demand for it is increasing rapidly. Engineers and contractors now acknowledge the superiority of this material for paving streets, alleys and sidewalks; flooring warehouses, cellars, fruit canneries, barns and stables; and for lining reservoirs, flumes and ditches. It makes a superb lining for wells and cisterns, and is said to make an unequaled water-pipe or main by using heavy duck-cloth as a base or core. It does not impart any taste to water, and disease germs and vermin avoid it. As a coating for piles to be used in salt or other water use has proved it invaluable. There is no doubt that it will supplant hard rubber for many purposes, being much cheaper and possessing many other advantages.

But it is on streets and roadways that it is going to prove most valuable. The wheelmen of America are great educators. They have not been long in the field, but in the short time they have been walking on wheels, they have done much to convince mankind that good roadways are as necessary and economical for farmers as for the dwellers in cities. They are enemies of the noisy, dusty, disease-germ generating cobble-stone, basalt block or any other kind of stone pavement; every argument used by them for clean, noiseless and healthy pavements is an argument in favor of the use of California asphalt for roadways, whether in city or country.

It will seem strange to the reader that while Cali-

fornia possesses more and better Asphalt than all the world besides, Buffalo, New York, and several other Eastern cities have more asphalt pavement than San Francisco, Los Angeles and San Diego combined. It is another evidence that a "prophet is not without honor except in his own country." It is a condition of things which will not continue. Los Angeles has five miles of clean asphalt pavement; San Diego a like amount, and San Francisco probably more than twice as much. Oakland has considerable of the best quality, and many smaller places have fine educating samples. These object lessons are producing an effect upon enterprising citizens, and causing them to support enthusiastically the efforts of such persistent advocates of noiseless and dustless pavements as Henry F. Williams, of San Francisco, who has been battling against silurianism for more than twenty years, and almost single-handed. Day is breaking. If the doctors may insist that the streets must be closed in front of the house of a prominent or wealthy patient, men of moderate means may be excused for demanding that their sick ones shall be protected from the useless and dangerous clatter made by vehicles passing over unsightly cobble stones. The germ is working. Within five years the majority of the streets in San Francisco will be covered with clean, noiseless, sightly germ-proof sheet asphalt pavement, and two glorious results will be attained: San Francisco will not have a single fault, but will be the most delightful summer residence city in the world, and a valuable and abundant California product will receive recognition as God intended it should when He made it the most valuable paving substance in Nature.

The asphalt deposits in Kern county have been known to exist for many years. As far back as February 20, 1864, a company with a capital of $1,700,000, was organized to utilize the vast body of asphaltum known to exist on the western edge of the county. Crude machinery, want of experience, lack of transportation facilities, and other apparent causes, impeded exploitation, and this company practically ceased to exist. Other companies were organized, mainly with the object of boring for oil, and have severally spent considerable money, but have generally accomplished little more than to confirm the belief that the deposits were of great value. There are two important districts, known respectively as the Sunset and Buena Vista fields. The Sunset field lies at the foot of the San Emigdio range of mountains, and the asphalt mounds or deposits here cover upwards of five thousand acres. A number of wells have been bored for oil, and six are now producing the heavy black oil known as maltha, and which carries a heavy percentage of very pure bitumen. The Buena Vista fields lie considerably north of the Sunset works, but at the foot of the same range of mountains. The asphalt mounds here cover over ten thousand acres of the surface, and the supply is known to be unlimited. The value of these deposits no man can safely estimate. It is into the hundreds of millions. No one will doubt this who considers the great number of uses calling for this material above enumerated, and the rapidity with which new uses for it are discovered.

The asphalt deposits in Kern county seem to be different from any others in the State. Those of greatest purity in Ventura county are practically per-

pendicular true veins, of no great thickness, between granite or slate walls. The bituminous rock mines are not taken into consideration, because the percentage of fixed bitumen is small in them compared with the product from the Kern county mines. In the Buena Vista and Sunset fields the layers of asphaltum are horizontal. The appearance indicates that at some period liquid asphaltum, or maltha, was forced from the interior of the earth, and spread out in great volume over the surface of the valley. In time the flow ceased, and the body hardened by the evaporation of the volatile substance it contained. Then sand, grass, sagebrush and mountain debris must have accumulated upon the layer until nature was ready to produce another discharge of liquid asphaltum. How long the alternating action continued no one can tell, but borings in one place show that the alternating stratas are over 300 feet deep, and there is no reason to suppose they may not extend to much greater depths.

The manner in which these fields were formed is not wholly theoretical. In the Buena Vista district are two wells which may be properly called asphaltum geysers. These are situated on opposite sides of a gulch, and some 200 feet apart. One has a mouth about five feet across and the other about three feet in diameter. They are evidently connected underground. One is always resting while the other is in ebulition, and they "spell" each other thus: Natural gas forces its way up from below, and swells the top layer of liquid asphalt until it puffs up like a balloon, finally breaking and discharging a quantity of asphalt over the rim of the well. Then the surface will quiet down, and immediately the other well, 200 feet away, com-

mences to inflate and finally breaks, and promptly the same performance is commenced at the other well. This alternating process goes on without rest, and the mounds are getting larger slowly but surely, and no one can doubt that in this manner the other mounds were builded.

The development of this mine of wealth, and bringing into use the vast deposits, amounted to very little until the organization of the [Standard Asphalt Company October 27, 1890. Solomon Jewett and H. A. Blodgett, bankers of Bakersfield, had meditated bringing the fine material to the notice of those having use for it, and at this time they associated with them Henry F. Williams, of San Francisco, and Sutherland Hutton and Louis Blankenhorn, of Los Angeles. These were men of affairs who had had great experience in the oil fields of the State, and in the use of bituminous rock and asphalt as applied to paving purposes. These gentlemen compose the Standard Asphalt Company. The Southern Pacific Railroad Company was interested to the extent of building a line of road forty-eight miles to Asphalto, in the Buena Vista district, and nearly thirty miles of it must depend for support almost exclusively upon the product of the asphalt deposit. The company assumed no risks. With its own engineers the fields were carefully surveyed and the probable amount of freight they would supply was closely estimated. Upon the report made the line was rushed to completion, and solely as a safe business proposition. The railroad company have no interest in the Standard Asphalt Company beyond that of common carriers, who will have a monopoly of the business between the refining

works at Asphalto and the outside world, which is becoming rapidly wedded to the belief that there is nothing in nature which can take the place of asphalt for roadways, sidewalks, the lining of cellars, reservoirs, irrigation canals, and one thousand other uses for which its inestimable value is now recognized. As no one has ever accused the Southern Pacific management with wasting money by building permanently unprofitable branches, it may be assumed that they know the extent and value of these deposits and the business ability of the men composing the Standard Asphalt Company. Without cheaper freighting facilities than the old-time burro or mule team there could be no hope of getting this high grade material into the hands of Eastern contractors at a price which would compel its use instead of the inferior article from the island of Trinidad. Much of the crude asphaltum mined at Asphalto is as rich in fixed bitumen as the refined Trinidad. When refined, as it is prepared for shipment, the Kern county product assays from eighty to ninety-five per cent. bitumen, and the refined Trinidad under sixty per cent. Large quantities of the refined article have been sent to market. One train of eleven cars was sent to Sedalia, Mo., in June, 1892, and much has been sent to Portland, Oregon, Kansas City, Salt Lake, Denver, and all the prominent towns and cities in California. This was all refined at the works in Sumner, near Bakersfield, and the crude material had to be hauled from the mine to that point, or more than thirty miles by mule team, and the possible profits were dissipated. There is not a doubt that the energetic members of the Standard Asphalt Company became very sensible of the true meaning of that oft-

used sentence, "All that the traffic will bear." Nor is there a doubt that they are now blessing the policy of the Southern Pacific Company, which has become as fixed as fate and as common as lovely weather in California, of building a branch of their road to any point where there is a prospect of future business, and where railroad conveniences are likely to improve and settle up the waste lands of the State. The result in this case was that the road was completed in an unusually short time, and the mule teams have been discarded. Thousands of tons of the refined asphaltum will reach Eastern and European markets during the World's Fair year, and the purity and excellence of the article will prove a revelation to contractors, and will help to acquaint the world with the marvelous wonders of God blessed California.

By extended experiment the customers of the Standard Asphalt Company have learned that the liquid maltha furnished by that company is superior to any other substance known for tempering the refined asphalt, and preparing it for use as pavement, roofing, cement or any other purpose for which it is adapted. The supply of liquid asphalt or maltha is believed to be unlimited. The explorations at Sunset and Buena Vista have extended over but a fraction of the territory known to contain the substance. The supply is far beyond the demand at this time, and future developments promise to keep it so.

In the immediate vicinity of these great beds of asphaltum are several other deposits which will develop into mines of great wealth. There is one bank of kaolin, almost pure white, and carrying thirty-five per cent. of aluminum. Alongside of this is a vast deposit

of nearly pure sulphur, mixed with scarcely any sand. When these, with the minerals yet undiscovered, and which the region of volcanic formation promises to reveal are developed, the district will be greatly sought after by the curious as well as careful investors. The enterprise and State pride of the Southern Pacific Company has removed every obstacle in the way of thorough development of every interest, and whatever the earth thereabouts contains of value will be found.

CHAPTER XIX.

THE PRESS.

One of the great instrumentalities for the spread of the gospel of progress and prosperity is the newspaper, and California has been specially fortunate in attracting large numbers of active and brainy men, who have given themselves to the work of earnestly and persistently aiding every worthy enterprise. It is the help of these great engines of intellectual strength which has spread abroad descriptions of the wonders of California, until all reading peoples are familiar with the loveliness of its climate, the fertility of its soil, and the picturesque beauty of mountain, canyon and valley.

There are about nine hundred of these disseminators of information—daily, weekly and monthly—prepared and printed in the State of California. They will rank with the best published in the oldest sections of the world, and very many of them are conducted, in whole or in part, by native sons and daughters of the Golden State. The first paper printed in California was issued at Monterey, then the capital of Alta California, in

August, 1846, on type and press brought there from Mexico, on which to print public documents. When Sam Brannan, then a Mormon, came from New York with his Mormon pioneers, he brought with him printing material, and issued the first number of the California *Star*, January 7, 1847, with Dr. E. P. Jones as editor. On May 22d, of the same year, Robert Semple issued the first number of the *California*, as editor and proprietor, he using the material which had done duty at Monterey the year before. These were weekly publications. Juan de la Rosa, the printer who brought the material to California, lived to the advanced age of 101 years, proving the healthfulness of the craft in California.

Soon after the discovery of gold was confirmed, the forces of both papers went to the mines, and no papers were issued until after the return of the editors, by which time there was no scarcity of practical printers in San Francisco. Both papers were revived, but were soon combined, and for a time appeared as the *Star* and *California*. These papers passed into the *Alta California*, with E. C. Kemble and R.C. Hubbard as editors. Soon the city became too metropolitan to be satisfied with news a week old, and the tri-weekly *Alta California* appeared. A month later it was a daily, and the next day appeared the *Journal of Commerce* and the *Pacific News*, both being published daily. A long list of journals saw light apparently for the sole purpose of dying, though they doubtless planted principles which lasted longer than their brief lives. The *Alta California* had an unlucky name or an unfortunate beginning. It was burned out twice, and was at one time owned by Pickering, Fitch & Com-

pany, but in May, 1858, was purchased by Frederick McCrellish & Company, who published it until it finally succumbed for want of patronage in 1891.

The *Morning Call* is the oldest morning paper printed in English in San Francisco. It was started by an association of printers. Their names were James J. Ayers, now of the Los Angeles *Daily Herald*; Charles F. Jobson, David H. Heggins, Llewellen Zublin and William L. Carpenter. It got its name in a peculiar way. After the force was organized there was a difference of opinion as to the selection of a name which should prove a veritable mascot. It was decided to settle the matter by resorting to "jeffing,"—throwing from the hand five square pieces of type metal, technically known as "em quads," with a nick on one side. As they were getting ready to settle the question in this primitive manner of casting lots, a bill poster stuck up a theatre program announcing the performance of a farce styled "Morning Call." That was instantly and unanimously adopted, and the *Morning Call* has been a power ever since. The first number appeared in December, 1856. The whole outfit cost $130. George A. Barnes, as well and favorably known as any newspaper man on the coast, bought out Carpenter soon after, and Peter B. Foster purchased the interest of Zublin. A peculiarity of the proprietors was that each could fill any place about a morning paper, and they changed posts of duty every week, so that no one could complain that he was doing more than his share of work. When the Frazer river excitement began the paper developed into a gold mine for its proprietors, and large dividends were paid weekly. In 1866 the *Call* passed under the control of Messrs. Pickering,

Fitch & Simonton, and Loring Pickering was managing editor until his death soon after the presidential election of 1892, his constant labors during that campaign having hastened that event. George A. Barnes is still with the *Call*, now as dramatic critic, and he has the warmest place in the regard of newspaper men and theatrical people.

The San Francisco *Chronicle* was started on January 27, 1865, as the *Dramatic Chronicle*, being really a small-sized theater program, containing a limited number of free advertisements. It was a success from the start, and was the first local paper to print the news of the assassination of President Lincoln, and appeared draped in deep mourning for a week thereafter. By July, it had a circulation of 6,000 copies. The *Dramatic Chronicle* had been started by Charles de Young. In September, 1866, M. H. de Young joined with his brother, and the firm name of the proprietors was Charles de Young & Company. The senior died April 23, 1880, since which time M. H. de Young has been sole owner and manager of the great metropolitan journal. It has always been enterprising, and has given, with the fullest details, all great events as they have transpired. It has been generally aggressive, attacking objectionable persons and principles with spirit and power, and has made for its proprietor enemies as well as friends; but in dealing with questions of interest to all the people, and fostering enterprises proposed in the line of progress, the *Chronicle* has evinced unusual energy, and has performed an immense deal of good. It has become renowned for its big papers and mammoth editions, which are sent to all parts of the world by the thousands. Its last annual, issued

January 1, 1893, was a masterly paper, giving a detailed history of every corner of the State. Of its absolute correctness there could be no doubt, and very much of it was so exactly adapted to the purposes of the California Gold Book, and prepared with such care and literary ability, that it appears in these pages, after its facts had been verified by such careful investigation as left no room to doubt its historical value. It comprised a history of events, persons and economic enterprises, which left nothing out worthy of having a place in a standard history of California. John P. Young, managing editor of the *Chronicle*, is an experienced newspaper man. His first training was received in the editorial room of John W. Forney's Washington *Chronicle*, and afterwards as the Washington correspondent of the Chicago *Times*. No better school can be found in any city, and he came from there a thoroughly trained editor, charged with a fund of information in regard to men and measures which have served to make him the most prominent and influential editorial writer on the Pacific coast. He is aided by a staff of true artists in their several departments, and the *Chronicle* is the equal in interest and influence of any of the Eastern journals. Mr. de Young, besides being president of the International League of Press Clubs, vice-president and California commissioner of the World's Fair, and performing the important duties required of the incumbent of each position ably and conscientiously, neglects none of the details of his own great business. Even his enemies admit that he has done more to forward the material interests of California than any man in the State, and will continue to work in her interest so long as he lives.

The *Examiner* first sought public favor as an evening paper in June, 1865. W. S. Moss owned it, with B. F. Washington as managing editor. Its editorials manifested great ability. The late Senator George Hearst purchased it in October, 1870, and immediately changed it to a morning daily. It became a power at once, being democratic in politics. In 1887 the proprietorship and management of the paper passed to W. R. Hearst. Young Hearst had just graduated from Harvard, having been thoroughly prepared for a course there by previous experience in the schools of San Francisco and a preparatory school at Concord, Conn. He entered upon the duties of managing editor with creditable ambition, and at once organized a staff of assistants and heads of departments which would have been unexpected in any but a trained journalist. Mr. C. M. Palmer, his business manager, was a pronounced success before Mr. Hearst obtained his services. A. B. Henderson, who has charge of the editorial columns in the absence of Mr. Hearst, was thoroughly trained on the editorial staff of the *Chronicle*. Readers everywhere know of Ambrose Bierce, whose caustic pen very frequently raises a blister on the pride and self-esteem of ambitious pengraphers, if it causes them no other inconvenience. He enlivens the Sunday issue of the *Examiner*, and is admired by even those he scores. All the writers on the *Examiner* please and interest its army of readers, and in many of the startling enterprises inaugurated by the *Examiner* to gather sensational news from the ends of the earth it has no superior in the world. The people of the country, not confined to San Francisco and California, know that if there is spicy news or exciting incident originating

anywhere some [illegible] corps of reporters or cororrespondents will prepare it for the readers of that paper.

The oldest daily paper on the coast is the California *Demokrat*, a German paper founded in 1853, by Dr. Von Loehr. In 1858 Frederick Haas purchased it, but continued Dr. Von Loehr as editor till his death, in 1877, when Mr. Gruenblatt was placed in charge as managing editor, and has continued in the position ever since. The *Demokrat* is influential and successful. Another German paper is the *Abend-Post*, which began as a daily in 1859. Since it has been under the management of Adolph, Charles and Leon Samuels it has attained great influence. There are 185,000 persons of German birth in California, and 60,000 in San Francisco, a magnificent number to whom to look for support for a paper in their own language.

The *Evening Bulletin* was first published Oct. 8, 1855. It took the side of the people in a vigorous manner, and was a success from the start. Its first editor, James King, was murdered by a desperado for exposing his crimes. He was succeeded by his brother, Thomas S. King. In June, 1859, Geo. K. Fitch bought an interest in the paper, and soon after Loring Pickering secured enough to give them full control, which they have since held. Mr. Fitch has been managing editor. The paper has ever had a reputation for cleanness and ability, and its clientage is among the most cultured and wealthy persons in California.

The *Evening Post* is one of the brightest and most enterprising evening papers in existence. It was started in 1871 by a few newspaper men as an experiment. The *Post* became the property of George Heazelton in 1889, and he has made it a financial and

influential success. Mr. Heazelton an experienced newspaper writer before purchasing the *Post*. He had graduated on the *Chronicle* as reporter, news editor, and Washington correspondent. and was fully equipped for efficient newspaper work.

The *Daily Evening Report* has been published since 1863, first as a weekly and later as a noon daily, to give the mining and stock board reports. In 1875 it was purchased by Wm. M. Bunker, who had previously been on the *Bulletin* as an editorial writer for eleven years. He was born with an editorial quill in his fingers—metaphorically—his father and his grandfather both having been editors. In 1877 Mr. Bunker sold Mr. A. C. Heister an interest in the paper, and he was given in charge the business management. Mr. Heister was a newspaper man of experience before he became associated with Mr. Bunker; between them they have built up a valuable property and have made an influential newspaper.

The *Journal of Commerce* is devoted to the business interests of San Francisco. James O'Leary is editor, and is probably the best posted statistician and economist in the city. The paper was established in 1872 and has had varying fortunes, being on the top wave when all kinds of business was prosperous, and contesting for life with the fates when business was slack. A. F. Chapman is business manager.

The *Mining and Scientific Press* is now in its forty-sixth volume, and nearly from its inception it has been under the editorial management of W. B. Ewer, its present managing editor. In 1847 Mr. Ewer was employed on the *Superior Mining Journal*, published in Boston, and owned by the brother of Elias Howe,

the sewing machine inventor. There was at the time considerable excitement over the copper discoveries in the Lake Superior region, and while that was dominant came news of the discovery of gold in California. Mr. Ewer made immediate preparations for going across the plains to the gold fields, intending to prosecute quartz mining. The late Loring Pickering was a companion on the journey, and October 9, 1849, the company arrived at Lawson's ranch, now the Vina vineyard, belonging to the Leland Stanford Junior University. Pickering went to Long's Bar and engaged in merchandising, but not long after bought an interest in the Placer *Times* and *Transcript* in connection with a Mr. Lawrence.

In 1851 Mr. Ewer started the Nevada *Democrat*, and in 1856 the *Mining Journal* at Grass Valley, which was the first exclusively mining sheet in California. The *Mining Press* was started in San Francisco in May, 1860, by Julius Silversmith, and was changed to the *Mining and Scientific Press* November 30th of the same year. The character and ability displayed by Mr. Ewer induced Silversmith to offer him the editorial management of his paper. This offer was peremptorily declined unless he was allowed to purchase an interest in the paper. Negotiations ended in W. B. Ewer becoming editor and proprietor of this mining paper November 8, 1862. Later T. W. Dewey purchased an interest and became business manager. The *Mining and Scientific Press* has had great influence with mining men during all the years of its existence. Its information has always been reliable, and its editor has had no interest in any schemes, and has advocated the interests of legitimate mining. Not once has it

made a mistake in regard to the worth of a mining camp, and its advice has been wise and for the benefit of investors. It has never been connected with stock deals. For several years Mr. Ewer has had as assistant editor Mr. Chas. G. Yale, a careful writer.

There are nearly one hundred weekly and monthly publications in San Francisco, and these generally have the appearance of being well sustained. The *Argonaut*, edited by Frank M. Pixley, is probably the best piece of property among them, and there are very many who assert that this is because it deserves to be. It is excellent from a literary standpoint. The *News Letter*, *Wave*, *Wasp*, and several others hold high rank.

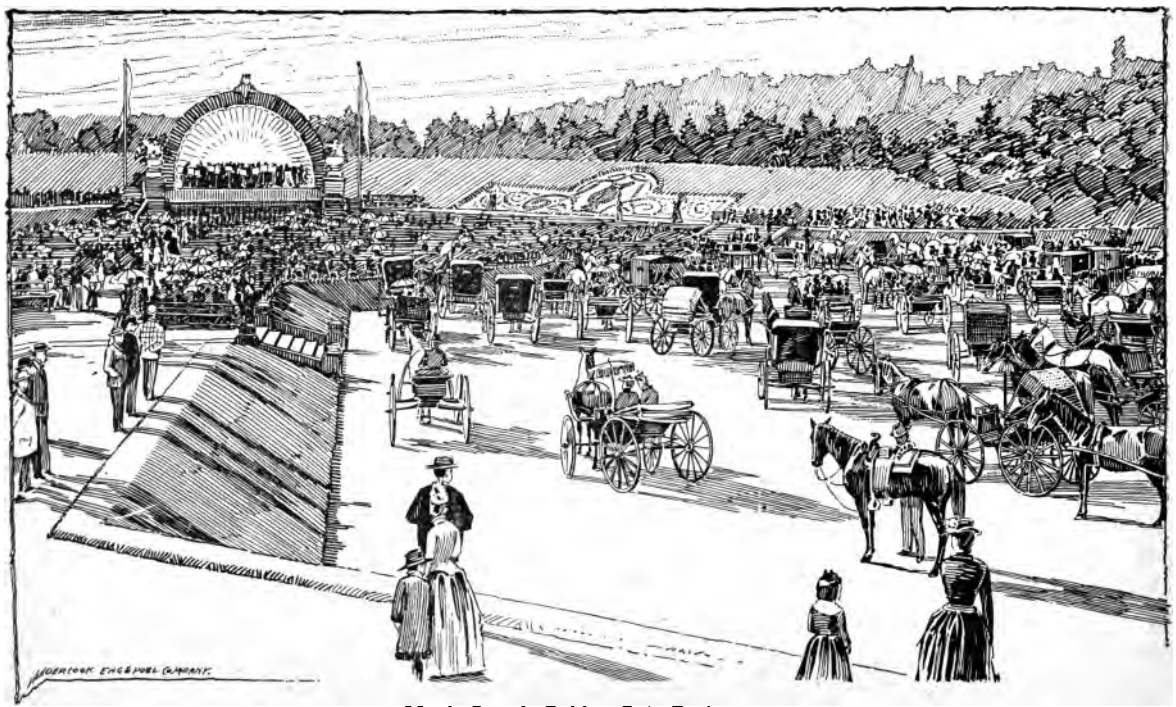
Among the magazines, the *Overland* is the oldest, and the latest and spiciest is the *Californian Illustrated Magazine*. Both these periodicals enlist the services of the best intellects on the coast, and are very popular with the reading public. California is inaugurating a new class of light literature, and not all of the writers developed have deserted the coast as did "Mark Twain" and Bret Harte. Joaquin Miller was glad to return to this genial climate when surfeited with the plaudits of Eastern admirers, and most likely the others will hasten back to extend their lease of life.

Oakland supports three sparkling daily papers, the *Enquirer*, edited by Frank A. Leach; the *Times*, edited by Frank J. Moffitt, and the *Tribune*, edited by W. E. Dargie. Like the papers elsewhere in California, these are proud of the locality in which they are published, and loyal to its interests. Illustrated editions are frequent, and no information which can benefit Oakland or California is permitted to rust for lack of telling. It is thus that the outside world is made

acquainted with the marvelous beauties and advantageous possibilities of the place, so that those who are attracted to Oakland by the newspaper photograph will recognize the place at once, and feel perfectly at home on their arrival.

The postal officials are aware that many times as many newspapers go from California to other parts of the world, as enter California from abroad. Nothing has had more to do with exciting and keeping alive an interest in the wonderful State and its more wonderful progress. The local paper is a transcript of events happening in its own vicinity, a business directory and a health report, and one that can be relied on as absolutely correct. The resident of California may send back personal letters, but they will be deemed partial and interested, while the local newspaper will be accredited as an impartial historian, with no private ends to serve. The people of California have learned this valuable lesson, and when their paper has been perused, mail it to some one abroad who will be glad to read of California. There is not an issue of any paper published in the State which may not be sent out as a messenger of glad tidings to those whose lines have not been cast in the pleasant places which cover and encircle all the glorious Golden State.

The Pacific Coast Women's Press Association is one of the most efficient instrumentalities for spreading throughout the East and Europe the wonderful attractions and inestimable advantages of California. It is composed of the brainest and most cultured women on the coast, who were united in the association by the great and influential executive ability and rare tact of Mrs. Nellie Blessing Eyster and the lamented Emelie



Music Stand, Golden Gate Park.

T. Y. Parkhurst, whose early decease was an irreparable loss to society and literature. The members of the association are indefatigable workers, and very much that flows from their pens is descriptive letters teeming with pen photographs of the delights of life in California. Wherever they go they are in demand, as Eastern people never tire of the inexhaustible wonders of the gorgeous land under the setting sun. They are a power, too, in the communities in which they reside, and to them and their female friends is due the high standard of culture, refinement and true womanhood which is everywhere apparent on the Pacific coast. On the rostrum and with the pen Mrs. Eyster is a prophet who is most honored in her own country, where her rare eloquence and worth are best known and most highly appreciated.

CHAPTER XX.

FIREMAN'S FUND INSURANCE COMPANY.

This is the oldest and most popular local insurance company on the Pacific coast. It was organized May 1, 1863, with a capital of $200,000. Three increases have been made since. In 1865 the capital was increased to $500,000; in 1880 to $750,000, and in 1886 to $1,000,000. The splendid management of the company is best shown by the fact that the privilege of subscribing to the stock at the last increase commanded a premium of thirty to forty per cent. The stability of the company has been tried "as by fire" on several occasions, notably by the immense losses sustained when Chicago was practically swept from the earth, and a little later by the memorable fire

at Boston. The losses by the Chicago fire aggregated a greater sum than the capital stock of the company at that time, and by the Boston fire were immense considering the distance of the company from the scene of devastation. Besides, a good many destructive fires have taken place on the coast, where the company is most popular; but the managers and stockholders have always proved equal to the emergency, and have satisfied every loss in full, and without calling for outside aid. Since its organization the company has received over twenty-three millions of dollars in premiums and has paid losses aggregating over twelve million dollars. For the year 1892 the income was $1,886,183, and the expenditures $1,703,340. The cash assets amounted to $3,037,706, and after providing for every possible liability, including $1,000,000 capital paid in gold coin, it has a net surplus of $680,974.

The San Francisco officers are: D. J. Staples, president; W. J. Dutton, vice-president; B. Faymonville, secretary, and J. B. Levison, marine secretary. The central department is at 157 and 159 La Salle street, Chicago, with Thomas S. Chard as manager. The Eastern department is in the Mason building, Boston, with Charles W. Kellogg manager. The home office is in the company's magnificent building, corner of California and Sansome streets, and where its foundations are laid vessels unloaded in 1849, it being almost upon the old-time shore line of the bay of San Francisco.

Vice-President Dutton is one of the ablest and most popular insurance experts on the Pacific coast. He organized the Marine Department of the Fireman's *Fund* a quarter of a century ago, and was the marine

secretary until promoted. His successor was selected because of his rare fitness for the position, as have been all the other officers and representatives of this company.

As the Fireman's Fund Insurance Company, through its officers, is a direct connecting link between the Argonaut era and to-day, a brief sketch of its president, David Jackson Staples, will prove historically interesting. One of his ancestors fought in King Phillip's war in 1660, and D. J. Staples, was born at Medway, Mass., May 3, 1824. At 11 years of age he commenced service in a cotton mill, and at 19 commenced learning the trade of machinist and locomotive builder at Taunton, Mass. In 1848 he married Mary Pratt Winslow, a descendant of Colonial Governor Winslow of Connecticut. That winter, in copartnership with twenty-four others, he bought the bark Helen Augusta, and loaded her with such merchandise as was believed would be needed in the California market, and started her for San Francisco.

The owners came across the plains in the following year, arriving at Sacramento September 27, 1849. The vessel was already in port. The goods proved to be in demand, and were sold off at a profit, when the company disbanded. Mr. Staples gave mining a brief trial. About this time he purchased a large tract of land on the Mokelumne river. This he improved, paying $700 per 1,000 feet for the lumber with which his house was constructed. He planted a crop of wheat, and went East for Mrs. Staples, arriving with her at the new home on the coast in 1851.

Mr. Staples was a delegate to the Chicago convention in 1860, and supported the candidacy of Mr.

Lincoln, and became acquainted with him there. He was at his inauguration in 1861, and remained in Washington until the war was under way. When Sumter was fired upon, and the rebel element in Washington City was wild with excitement, and the life of the Nation hung by a thread, Mr. Staples, with three hundred others, formed the Cassius M. Clay battalion, and entered instantly upon the dangerous duty of guarding the Capitol. Day and night these gallant men were at their posts, until the hosts from the North came to the relief of the President. Then President Lincoln advised Mr. Staples to return to California, where the services of loyal adherents of the Union were more in demand than anywhere else in the country, and he reluctantly accepted his discharge, accompanied by a certificate from Secretary Cameron, endorsed by Mr. Lincoln, detailing the untiring manner in which he had performed his duty as guard while the Nation was in greater peril than at any other time during the whole war. No wonder that the Geo. H. Thomas Post, Grand Army of the Republic, considers itself honored by the membership of D. J. Staples. He was an original volunteer, enlisting even before a call had been made by the President.

The Board of Underwriters of San Francisco is composed of the best and most influential citizens. It contains the representatives of the principal local, Eastern and foreign insurance companies doing business west of the Rocky mountains. Through its efforts great good has been accomplished, and to it is due much of the wonderful efficiency of the San Francisco Fire Department, which makes a destructive fire next to impossible. For seventeen consecutive years Mr.

Staples has been president of the Board of Underwriters.

The foregoing facts and figures explain in part the rapidly increasing popularity of the Fireman's Fund Insurance Company with that class which seeks and patronizes the safest and best, not alone on this coast, but in the large cities of the East. The further reason is the exact adaptability of the several officials to recommend everything they have in hand, and to encourage confidence by strictly deserving it. The Fireman's Fund Insurance Company will expand as rapidly as does the business and importance of San Francisco.





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